SIERRA LEONE 2015 POPULATION AND HOUSING CENSUS

NATIONAL ANALYTICAL REPORT

STATISTICS SIERRA LEONE (SSL)
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We wish to thank the Government of Sierra Leone for the financial and oversight support to the project. Special thanks goes to our development partners DFID, Irish Aid, UNFPA and UNDP for providing the funds, technical support and guidance in the implementation of the Census project.

DISCLAIMER

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The 2015 Population and Housing Census is the fifth modern census conducted in Sierra Leone since independence. It was conducted between 5 and 18 December 2015 with 4th December as census night. Data collection was completed on 18 December 2015 and data processing ended in October 2016.

The main objective of the census was to provide quality and timely statistical information for development planning, policy formulation and service delivery, as well as for monitoring and evaluation of development programmes and plans. To facilitate proper use of the data, a set of statistical tables were produced, according to the census tabulation plan. Further and detailed analysis of the data was then carried out and analytical and thematic reports produced and widely disseminated.

This analytical report is one of a series of publications that have been released since the provisional results and the summary of the final results were released in 2016. It contains statistical tables which could be used by ministries, departments and agencies, local councils, development partners and even the private sector to monitor progress in the implementation of development programmes and policy formulation.

The report presents the census methodology, the country's profile and lessons learnt during the implementation of the 2015 Census. It provides information on key population characteristics at national, regional and districts as well as at rural and urban levels. It contains data on the socio-economic impact of the Ebola Virus Disease.

The conduct of the 2015 Census would not have been possible without the massive mobilization and utilization of human, financial and material resources. We therefore wish to express our profound gratitude to institutions and organizations that contributed to the planning, organization, funding and implementation of the census.

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ABBREVIATIONS

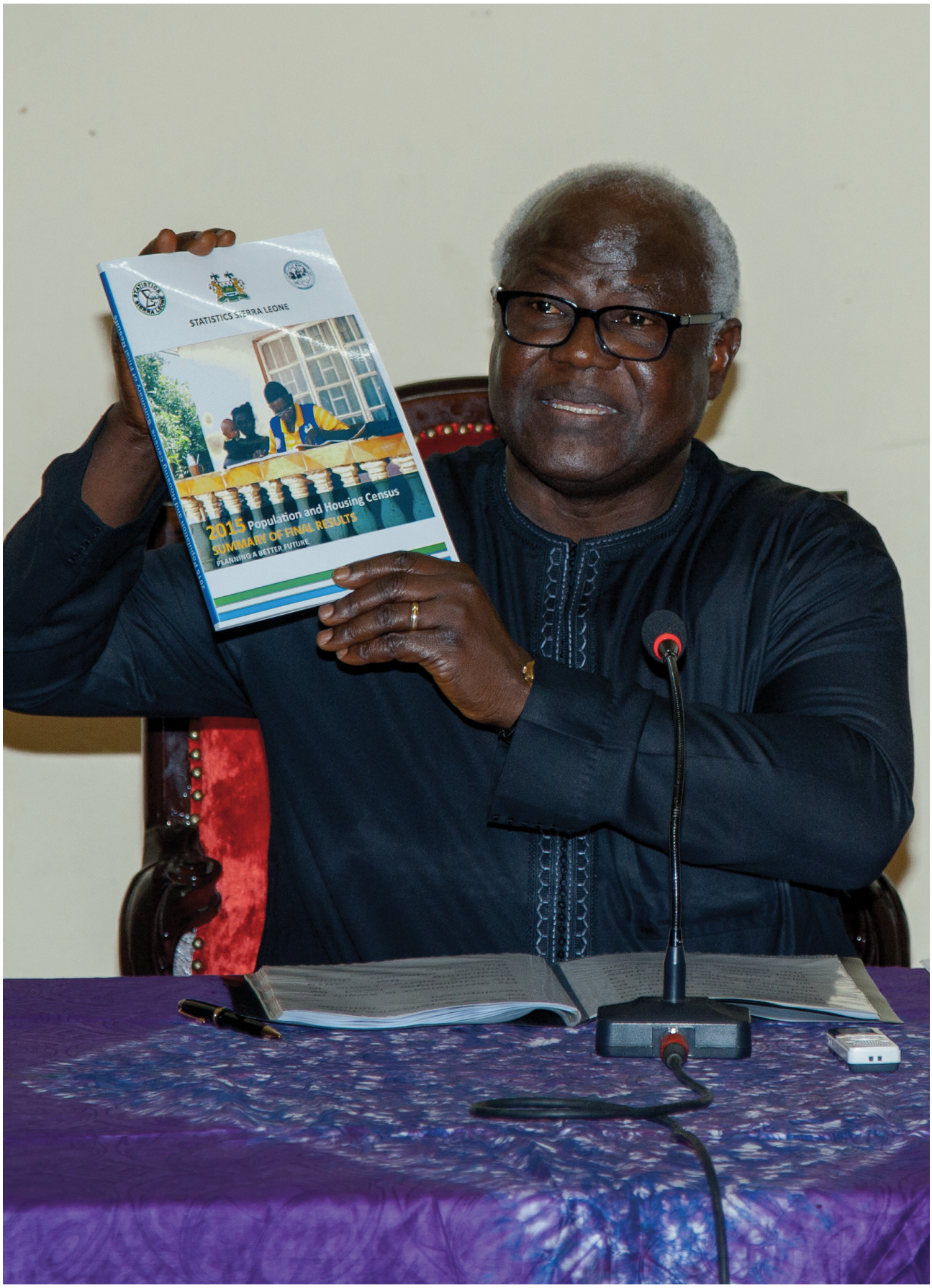
A4P	Agenda for Prosperity
ADB	African Development Bank
APC	All People's Congress
AIDS	Acquired Immune Deficiency Syndrome
AU	African Union
CAC	Census Advisory Committee
CATCs	Census Advisory and Technical Committees
CCPAC	Census Communication, Publicity and Advocacy Committee
CPG	Census Planning Group
CS	Census Secretariat
CWNs	Commonwealth of Nations
DFID	Department for International Development
DPs	Development Partners
EAs	Enumeration Areas
ECOWAS	Economic Community of West African States
EU	European Union
FAO	Food and Agricultural Organization
GER	Gross Enrollment Ratio
GIS	Geographic Information Systems
GPS	Global Positioning System
GoSL	Government of Sierra Leone
HDI	Human Development Index
HIV	Human Immune Virus
ICT	Information and Communication Technology
IMT	International Monitoring Team
INSS	Integrated National Statistical System
IRISH AID	Irish Government's Official Aid Programme
JSS	Junior Secondary School
LCs	Local Councils
MDAs	Ministries, Departments and Agencies
MDGs	Millennium Development Goals

ABBREVIATIONS

MER	Migration Effectiveness Ratio
MICS	Multiple Indicator Cluster Survey
MoFED	Minister of Finance and Economic Development
MRU	Mano River Union
MPI	Multidimensional Poverty Index
NAC	National Advisory Committee
NCDDS	National Census Data Dissemination Seminar
NEC	National Electoral Commission
NER	Net Enrollment Ratio
NGOs	Non-Governmental Organizations
NPC	National Population Commission
NPPA	National Public Procurement Act
NPPDPW	National Population Policy for Development Progress and Welfare
NU	Njala University
OIC	Organization of Islamic Cooperation
PAS	Population Analysis Spreadsheet
PASEX	Population Analysis System
PEAL	Preliminary Evaluation and Analysis Plan
PES	Post-Enumeration Survey
PHC	Population and Housing Census
PHER	Public Health Emergency Regulations
PPRs	Parity Progression Ratios
PRSPs	Poverty Reduction Strategy Papers
PWDs	Persons with Disabilities
SGDs	Sustainable Development Goals
SLAJ	Sierra Leone Association of Journalists
SLDHS	Sierra Leone Demographic and Health Survey
SLIBS	Sierra Leone International Benchmarks Systems
SLPP	Sierra Leone People's Party
SMAM	Singulate Mean Age at Marriage

ABBREVIATIONS

SSL	Statistics Sierra Leone
SSLC	Statistics Sierra Leone Council
SSS	Senior Secondary School
UN	United Nations
UN Women	United Nations Women
UNAIDS	The Joint United Nations Programme on HIV/AIDS
UNCT	United Nations Country Team
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNHCR	United Nations Human Rights Commission for Refugees
UNICEF	United Nations Children's Fund
USL	University of Sierra Leone
WB	World Bank
WHO	World Health Organization


STATISTICS SIERRA LEONE
2015 Population and Housing Census
SUMMARY OF FINAL RESULTS
PLANNING A BETTER FUTURE

EXECUTIVE SUMMARY

Introduction

The 2015 Sierra Leone Population and Housing Census is the fifth in a series of modern censuses conducted in 1963, 1974, 1985 and 2004. Census data are used for policy making, planning and administration, research, business, electoral boundary delimitation and sampling frameworks for surveys (United Nations, 2008).

The 2015 Census used two types of questionnaires to collect socio-demographic data: the institutional questionnaire which collected information on five items (name, age, sex, nationality and place of birth) and the household questionnaire. The household questionnaire had seven sections and collected information on geographical identification, population characteristics, housing facilities, ownership of durables, agricultural module, death in the household and Ebola socio-economic impacts.

This analytical report comprises 16 chapters covering a wide range of topics such as census methodology, migration and urbanization, housing conditions, population in agriculture, persons with disability, Internet, and Ebola's socio-economic impacts. Its primary objective is to provide policy makers, academics, data users and the general reader with timely and relevant demographic, socio-economic data and information for policy formulation, development planning, monitoring and evaluation of programmes and plans, as well as service delivery.

Main findings

This section highlights some of the major findings of each chapter.

Chapter One: Introduction, profile of Sierra Leone and census methodology

The census data collection activities comprised three main phases: pre-enumeration, enumeration and post-enumeration activities. The first phase involved preparatory activities like mapping of enumeration areas, census questionnaire construction and its pilot work, as well as preparation of ancillary documents (for example, enumerators' manuals, summary sheets and house listing forms).

In the main, the 2015 Census was successfully conducted. However, there were challenges including recruitment and training issues, boundary disputes and monitoring and supervision. These were mitigated with appropriate solutions.

Chapter Two: Evaluation and adjustment of age-sex data

Accurate data on age and sex are vital information in demographic analysis, socio-economic planning and service delivery. The sex ratio, age specific sex ratios, visual observation and Whipple's, Myers' and Bachi's indices of digit preference, as well as the United Nations age accuracy index, were used as data evaluation methods to examine the quality of the census data.

The results indicate that there was evidence of age heaping and that the quality of the age-sex data was rated as 'highly inaccurate'. The evaluation results suggested that the adjusted age-sex distribution of the population should be used for making population projections and developing plans.

Chapter Three: Population size, composition and age-sex structure

Knowledge of population size, composition and age-sex structure is essential in sustainable development planning and service delivery. The 2015 Census enumerated 7,092,113 persons comprising 3,490,978 males and 3,601,135 females respectively. The Northern Region had the largest share of the population, while the Western Region had the smallest share.

The population has increased by about 2 million persons between 2004 and 2015 with a 3.2 per cent annual growth rate. The population of Sierra Leone is young with 40.8 per cent of the population under 15 years, 55.7 per cent aged 15-64 years and 3.5 per cent aged 65 years and above. The proportion of non-Sierra Leoneans was 0.6 per cent. The Mende language is the main language followed by Temne and Krio. Islam is the most dominant religion, constituting 77 per cent.

Chapter Four: Household size, composition and structure

The household is the basic socio-economic unit whose welfare is of paramount importance to the government. The results show that the mean household size was 5.6 persons in 2015. The mean household size varied from 4.7 persons in the Western Region to 6.0 in the Northern Region. There were more male than female heads, 71.9 per cent compared with 28.1 per cent. Nearly a half of the households were extended households, while nuclear households and single-person households were 38.6 per cent and 6.4 per cent respectively.

Chapter Five: Fertility

Fertility, a major component of population change, has declined with the total fertility rate decreasing from 6.5 in 1974 to 5.6 in 2015. There are fertility differentials in terms of place of residence, region, educational attainment and marital status. For instance, the total fertility rate for women who have never been to school was 6.2 compared to 3.0 for women with tertiary education. The total fertility rate was higher in rural than urban areas.

A minimal change in the mean age at childbearing (29.2 years) was observed from the 2004 Census figure of 30 years. Regarding childlessness, 81 per cent of all women aged 15-19 years were childless but by age 45-49 years, just 8 per cent of women were childless. The phenomenon of childlessness was observed among married women and the percentages of married women who were childless and aged 15-19 and 25-29 were 42.9 and 11.9 respectively.

Chapter Six: Mortality and Orphanhood

The level of mortality reflects the health status of a population, including its health services. The risk of dying is also known to vary with age and sex. Deaths in children is a critical indicator of the level of socio economic development.

This chapter presents the levels and trends of childhood and adult mortality including maternal mortality and the mortality differentials. It also presents life tables which help mortality analysis, as well as information on orphanhood status of children under age 18.

The reported crude death rate is 14.7 per 1000 population. The results also show that the infant mortality rate for Sierra Leone is 96 deaths per 1000 while the child mortality rate is 67 deaths per 1000. The under-five mortality rate is 157 deaths per 1000. The educational attainment of a mother affects her child's survival rates, with women with tertiary education having an infant mortality rate of 63 per 1,000 compared to 108 per 1,000 among women with primary education. The results show that women have a higher life expectancy at birth of 51.3 years, compared to 47.6 years for men.The difference between the life expectancy at birth of males and females is 3.7 years. Maternal mortality rate is 1.8 deaths per 100,000 women while the adjusted maternal mortality ratio is estimated at 997 maternal deaths per 100,000 births. Most maternal deaths occur during pregnancy.

Chapter Seven: Migration and urbanization

Migration, which is one of the three components of population change, has consequences for places of origin and destination. The rural-urban migration has brought about an increase in the population of urban areas.

The analyses show that 85 per cent of the population had not moved from their district of birth, with the Northern Region registering the greatest proportion of non-movers, while the Western Region had the smallest number of non-movers. The urban growth rate of 4.2 per cent indicated a faster growth rate than the corresponding value for the rural areas (2.6 per cent) and this puts a heavier strain on educational and health facilities, as well as a need for the creation of more job opportunities.

Chapter Eight: Marital characteristics

This chapter on marital characteristics attempts to present an overview of the marital status situation and its related characteristics at the time of the census. It does not answer the questions on how and why. More detailed information is usually collected in the inter-censal demographic and health surveys.

The main findings of this chapter show that:

i.The proportion never married is the highest in the country with 46 per cent of all marital status categories. Polygamous marriages follow with an overall proportion of 30 per cent, ranging from 43 to 55 per cent respectively in the Northern and Southern regions.
ii.There are notable differences between urban and rural areas where the proportions never married are 52 and 41 per cent respectively.
iii.The pattern for the districts follows the national one with the proportions never married dominating in all districts.
iv.Religion does not appear to influence the type of marital status. The Islamic faith is dominant with 76 per cent of the population, while the proportion of the Christian faith is 23 per cent. Islam dominates in all marital status categories, ranging from 65 per cent for those co-habiting for 5 years or more to 80 per cent for those monogamously married.
v.On economic activity status, in the case of employed men, the proportion who are polygamous dominates with 47 per cent, compared to 23 per cent for polygamous women. For the unemployed category, 49 per cent of men and 40 per cent of women belong to the never married category.
vi.As far as household headship is concerned, 72 per cent of all the households are male headed, as opposed to 18 per cent which are female headed.

Chapter Nine: Education and literacy

Education is the key to sustainable development of a country and female education, empowers women to participate fully in the socio-economic development of a country like Sierra Leone. The results reveal that most of the population had been to school. Fifty six percent of persons aged three years and older had been to school, of which 18.2 percent attended school in the past, while 37.3 percent were enrolled in school at the time of the census. Regarding sex differences, 60.2 percent of the male population had been to school compared to 51.0 percent of females. In respect of the proportions attending school at the time of the census, the females dominated schooling from age three to 14 years, while the proportions attending school at the time of the census for males exceeded those for females from age 15 to 29 years. The proportion literate was 51 percent compared with 49 percent not literate. Thirty seven percent of the rural population was literate compared to an urban proportion of 70 percent. The most literate population was the 15-19 age group followed by persons aged 20-24 years and 10-14 years. A comparison of enrollment ratios for the population aged 6-11 years, 12-14 years and 15-17 years suggest that the capacity of the education system at the junior and senior secondary school levels has expanded between 2004 and 2015.

The distribution of the economically active population by age group and sex indicate that the proportions for males in the younger age groups, 15-34, are higher for males than for females, while the opposite is the case for the older age groups.

The main findings on the employed population were:

i.More than three-quarters of this population are self-employed without employees. Two-thirds of them are in rural areas.
ii.Three-quarters of the paid employed population are in urban areas.

iii. Nearly two-thirds of paid employees have no education – there are significant difference between males and females.
iv. More than three-quarters of employed population in rural areas have no education.
v. Nearly six out of ten of all employed persons are agricultural or fishery workers.
vi. Crop farming is the dominant industry with 56 per cent of all employees.
vii. Between eight and nine out of ten employed people are self-employed.

Chapter Eleven: Housing conditions

Housing characteristics are analysed by looking at households by region and place of residence. Trend analysis over the 30-year period (1985, 2004 and 2015) for the entire country is attempted wherever the data permit (data are available and definitions have remained consistent).

There has been a decline in the average household size from 6.6 in 1985 to 5.6 in 2015 but the number of households has increased two and a half times from 485,711 in 1985 to 1,265,468.

Seven out of 10 of households are owner occupiers while two in 10 are renting.

There has been a 10 per cent increase in the proportion of households with private toilet facilities and the proportion of households using flushed toilet doubled between 2004 and 2015 (3.5 per cent and 8.5 per cent respectively).

The main source of information for all households was radio for all the regions and both rural and urban households. Primary schools were closer to households than health facilities with the majority (68.8 per cent) within less than half mile. Eight out of 10 households had water within less than half a mile away.

Chapter Twelve: Population in agriculture

The 2015 census questionnaire has an agriculture module which collected information on crop production, fishery and animal husbandry. The results indicate that 732,461 agricultural households were engaged in crop production, fishery and animal husbandry activities and rice was the predominant crop. Eighty-two per cent of agricultural households were in the rural areas compared to 18 per cent in the urban areas.

Cacao and coffee occupied the largest land area for cultivation, while the proportion of land under cultivation of different crops varied among the regions. The mean number of cows owned by keepers was the highest and the mean number of animals owned by keepers ranged from four goats to 19 cows per keeper. The Northern Region dominated in the ownership of livestock. Agricultural households had less access to agricultural facilities like tractors, power tillers, threshers, rice millers and oil palm pressers.

Chapter Thirteen: Poverty and durable assets

The possession of certain durable assets by household gives an indication of its standard of living. The standard of living, when put alongside education and health, show the deprivation status of households. The results show that 40 per cent of households were deprived in primary school completion compared to 19 per cent on child school attendance. The goods most commonly owned by households were a bed (81 per cent), radio (66 per cent) and mobile phone (63 per cent).

Household heads aged 55-59 years had the largest ownership proportions for 10 out of the 16 durable goods. It was also found that household heads who have never married had the highest ownership proportions in all but five durable goods: bed, bicycle, motorcycle, truck and boat.

High levels of educational attainment tend to be related to a high proportion of ownership of durable goods. For instance, household heads with tertiary and higher education topped the list of ownership of all durable goods, except boats.

Chapter Fourteen: Persons with disability

Government policy towards ensuring that persons with disability participate fully in the socio-economic development of the country has not yet yielded the expected results.

The census results indicate that persons with disability constituted three per cent of the population of Sierra Leone. It found that 67 per cent of persons with disability were living in the rural areas compared with 33 per cent in the urban areas. More males than females are persons with disability.

The Northern Region had the highest percentage of persons with disability (35.3 per cent), while the Western Region had the smallest percentage. Disease or illness was found to be the main cause of disability. The findings reveal that the most common types of disability were physical disability or polio (21.8 per cent), partially sighted (15.2 per cent), blind or visually impaired (12.5 per cent) and physical disability or amputee (8.9 per cent). Males with disability had better socio-economic characteristics (for example, employment, educational attainment and literacy status) than their female counterparts.

Chapter Fifteen: Internet, alcohol and tobacco use

The 2015 Census questionnaire was the first to include questions on Internet accessibility and use. A question was also included about the consumption of alcohol and tobacco. The questions were asked of those aged 10 years and over.

Overall, the largest proportion of the population had no access to the Internet (86.7 per cent). Looking at gender, 16 per cent and 10 per cent of males and females respectively, were accessing the Internet.

Close to 23 per cent of the population in urban areas had access to internet facilities whereas only 5.5 per cent had access in the rural areas. Most of the tobacco and alcohol consumers were in the age range 35-39 years constituting 14.3 per cent of the total. The proportions were similar by sex. In contrast, the smallest proportion of tobacco and alcohol consumers were, as might be expected, in the age group 10 to 14 years.

The findings reveal that most of the consumers (65.3 per cent) had no formal education. Tobacco was consumed by the following categories of the population: self-employed without employees (14.8 per cent), self-employed with employees (13.6 per cent), paid apprentice (12.8 per cent), unpaid family workers (12.6 per cent), persons who worked before and now looking for work (12.5 per cent), and retired/ pensioners (12.3 per cent).

Chapter Sixteen: Ebola socio-economic impacts

The Ebola disease carries a high risk of death. The findings show that 81.1 per cent of a total of 13,373 infected persons in Sierra Leone died during the 2014 outbreak. More males than females died, while most of the victims were persons aged 15-35 years. There were more rural than urban deaths.

Ebola had a negative impact on the incomes of the working population. For instance, 55 per cent of the working population reported that their incomes decreased because of the outbreak. A higher percentage of infected persons (57 per cent) in the rural areas did not seek medical care compared with 42.9 per cent in urban areas.

Recommendations

A household sample survey should be conducted to study the complexities of household and family structure. The Government should make financial resources available to Statistics Sierra Leone for it to perform this task.

There is a need to institute measures to contain fast population growth so that it does not thwart development efforts. The family planning programme should be reinvigorated and couples should be educated about the many benefits of a small family size as well as the health dangers of excessive childbearing.

There is a need to improve policies that encourage adolescent girls to delay childbearing. The potential of women must be unlocked by encouraging girls to stay on at school longer - at least up to secondary school level. This would build a generation of empowered women.

The Government should plan for the increasing number of young persons by building more infrastructure for education, especially primary schools, as well as health facilities for both children and adults.

The Government and stakeholders should sensitize the population about Ebola. This calls for a close collaboration between the Ministry of Health and community leaders to ensure that good and adequate disease outbreak controls are provided.

The analysis of persons with disability points to the need for Government to institute programmes that target these persons to improve their wellbeing and ensure they are given the opportunity to participate fully in the socio-economic development of the country.

The country needs long-term sustainable resources of funding for development. The Government should explore the possibility of mortgaging some of its untapped mineral wealth to raise funds for socio-economic development.

CHAPTER 1: INTRODUCTION, COUNTRY PROFILE AND CENSUS METHODOLOGY

1.1 Introduction

The 2015 Population and Housing Census (PHC) is the fifth modern census taken in Sierra Leone. The main objective of this census is to contribute to the improvement of the quality of life of the people of Sierra Leone through the provision of relevant, reliable and timely data and information for development planning, policy formulation and service delivery, as well as for monitoring and evaluation of development programmes and plans.

The 2015 Census offered increased availability and accessibility of accurate and reliable data on a wide range of demographic and socio-economic characteristics of the population for evidence-based decisions at national, sub-national and sectoral levels and to support developmental programmes such as the Agenda for Prosperity, the Sustainable Development Goals (SDGs), the Sierra Leone International Benchmarks Systems (SLIBS) and to support the elections process.

The census process followed international standards and best practice by first of all establishing a robust governance structure that involved various committees like the National Advisory Committee (responsible for policy direction), the Technical Committee (responsible for all technical guidance, vetting all census instruments) and the Publicity Committee (responsible for census education and advocacy). In addition, all decisions of these committees were reviewed and approved by Statistics Sierra Leone Council before implementation. The 2015 Census was conducted between 5 and 18 December 2015, with reference to the night of 4 December as census night.

This analytical report could be used by ministries, departments and agencies (MDAs), local councils, development partners and the private sector to monitor progress in the implementation of development programmes and policy formulation. The information is presented at national, regional and district as well as at rural and urban levels.

Subsequent censuses collected new data items (including type of dwelling unit, repair needs of dwelling unit and number of rooms) and more detailed data on some existing items such as water. In 2015, information was sought on sources of water supply for drinking and also for domestic use. In the previous censuses, data had only been collected on source of water supply and source of drinking water in 1985 and 2004 respectively. These additional data items provide the opportunity for a more detailed assessment of the housing conditions and quality of life of the population. This information has obvious implications for the design, implementation, monitoring and evaluation of policies and programmes aimed at improving living standards. The report analyses and discusses housing characteristics of households by region and place of residence. Trend analysis over the 30 year period (1985, 2004 and 2015) for the entire country is attempted wherever the data permit (data are available and definitions have remained consistent).

1.2 The profile of Sierra Leone

Sierra Leone is a country in West Africa. It is bordered by Guinea to the north-east, Liberia to the south-east, and the Atlantic Ocean to the south-west. The country has a tropical climate, with a diverse environment ranging from savannah to rainforests. The total land area is 71,740 km (27,699 sq. miles) and there is a population of 7,092,113 (based on the 2015 Census). It is a constitutional republic with a directly elected president and a unicameral legislature.

Sierra Leone is made up of four administrative regions: the Northern Region, Eastern Region, Southern Region and the Western Area, which are subdivided into 14 districts. Each district has its own directly elected local government, though with limited power, as most of the power is held by the central government in Freetown. It became independent from the United Kingdom on 27 April 1961, led by Sir Milton Margai.

The current constitution of Sierra Leone was adopted in 1991, though it has been amended several times. Since independence to the present, Sierra Leonean politics has been dominated by two major political parties; the Sierra Leone People's Party (SLPP) and the All People's Congress (APC).

Sixteen ethnic groups inhabit Sierra Leone, each with its own language and customs. The two largest and most influential are the Temne and the Mende people. The Temne are predominantly found in the north of the country, while the Mende are predominant in the southeast. It is a Muslim majority country, with the overall Muslim population at 78 per cent of the population, though there is an influential Christian minority at about 21 per cent. Sierra Leone is regarded as one of the most religiously tolerant nations in the world where Muslims and Christians live and work side-by-side in peace.

Sierra Leone has relied on mining, especially diamonds, for its economic base. It is also among the largest producers of titanium and bauxite, a major producer of gold and has one of the world's largest deposits of rutile. The country is home to the third-largest natural harbour in the world. It is a member of many international organizations including the United Nations, the African Union, the Economic Community of West African States (ECOWAS), the Mano River Union, the Commonwealth of Nations, the African Development Bank and the Organization of Islamic Cooperation.

1.3 Population censuses in Sierra Leone

The first population count in Sierra Leone was undertaken in 1802 in what is now the Western Area. However, the first modern population census to cover the whole country, was conducted in April 1963. Since then, four more censuses have been undertaken in December 1974, December 1985, December 2004 and December 2015 respectively. It is worth noting that because of the difference in the methodology used in the censuses prior to 1963, the population totals of the country prior to 1963 cannot be compared with those of recent censuses.

Due to the improvement of the census methodology in the 1963 population census, a reliable and trustworthy population figure of 2,180,355 was accepted for informed consent and further improvement on the other censuses continued.

The 2004 Census collected information on many demographic and socio-economic characteristics and recorded a total population of 4,976,871 persons, with a sex ratio of 94. Its preliminary report was published in February 2005 and the analytical report finalized in July 2006.

Following the decennial census programme, the next census was expected in December 2014. However, following the spread of the Ebola epidemic from Guinea and Liberia to Sierra Leone, with the first case recorded in May 2014 in Kailahun District, a recommendation was made by Statistics Sierra Leone (SSL) to the Government of Sierra Leone that the main field enumeration should be shifted from December 2014 to April 2015. But as the epidemic intensified, it was further postponed to December 2015. The Government of Sierra Leone accepted and announced both postponements.

The population of Sierra Leone has grown from 2,180,355 in 1963 to 2,735,159 in 1974, 4,976,871 and 7,092,113 in 2004 and 2015 respectively.

1.4 Uses of census data

Population data are needed on a continuing basis for policy formulation and implementation, monitoring and evaluation of the country's population programme and development planning. The uses of population and housing census data are numerous and very key to the development planning of a country. The information generated serves various purposes. Essentially, census data presents a full and reliable picture of a country's population in terms of its size and spatial distribution, demographic, social and economic characteristics, as well as its housing conditions.

Being a source for evidence-based decision making, census data are critical in the demarcation of constituencies/wards and the allocation of representation on governing bodies. The census also provides data for the calculation of social indicators, particularly those that are needed for small areas or small population groups, as well as those that may be observed infrequently in the population.

Census data are also useful in categorizing the population with varying types of vulnerability. Among the special groups are minorities, the physically challenged, orphans, youth and women. Their demographic and socio-economic attributes require special treatment in policy and programme terms. This plays an indispensable role in ensuring equitable allocation of national funds and services.

Census data can also provide data for further analysis, leading to published materials, policy documents and research on issues generating interest and arousing curiosity. University academics and students constitute a special group that benefit greatly from census data since it could be referenced for publication of academic and policy papers, dissertations and thesis and the launching of new research interests and agendas. It would also provide better sampling frames for future surveys, quality maps and an expanded data processing facility that would constitute a major component of an Integrated National Statistical System (INSS).

In Sierra Leone, census data are a valuable tool for measuring and assessing development frameworks including the Poverty Reduction Strategy Papers (PRSPs) and the Millennium Development Goals (MDGs) which have now been replaced by the Sustainable Development Goals (SDGs). These lay emphases on combating human immune virus/acquired immune deficiency syndrome (HIV/AIDS), reducing poverty and food insecurity, reducing maternal mortality, improving education, reducing gender inequality especially gender-based violence, improving adolescent and young people's reproductive health and reproductive rights, regional imbalance in development and improving service delivery through a policy of decentralization (MDG report for Sierra Leone 2005).

1.5 Background and justification of the 2015 population and housing census

1.5.1 Background

A population census is the total process of collecting, compiling, evaluating, analyzing, publishing and disseminating demographic, economic and social data for all persons in a country at a specified time. It is the largest data collection undertaking in a country by a government. Not only does it cover the whole country, but it also provides information on every person, from newly born babies to the oldest person in the country, as well as for nationals and non-nationals. The data from the census are classified, tabulated and disseminated so that political leaders, election officials, planners, national organizations including non-governmental organizations (NGOs) and civil society, regional and international organizations can use the data in decision-making.

Following the dividend yielded after the 1802 population count in what is now called Western Area, the exercise continued on an irregular and non-scientific basis (obscured methodology) until the first modern population census, which covered the whole country, was conducted in April 1963. Since then, four more censuses have been undertaken using scientific methodologies. After the establishment of a National Population Commission (NPC) in 1982, Sierra Leone adopted a 'National Population Policy for Development Progress and Welfare' (NPPDPW) in August 1989 whose goals were:

(i) to make development planning and policy more comprehensive and effective by the incorporation of the demographic dimensions;
(ii) to achieve a rate of population growth that is economically sustainable;
(iii) to contribute towards meeting the basic needs of the people and enhancing the quality and utilization of the nation's human resources;
(iv) to promote the health and welfare of the people, especially those in the high-risk groups of mothers and children;

(v) to initially moderate the expected rise in, and later to progressively reduce, population growth rates through the spread of voluntary family planning and small family norms so as to facilitate the attainment of national economic and social targets; and
(vi) to guide rural-urban migration, so as to minimize socio-economic problems and optimize benefits to migrants and non-migrants alike in rural as well as urban areas.

The revised NPPDPW (August 1989) affirms the application of internationally recognized human rights standards to all aspects of population programmes in the country. This concept renewed the opportunity in the post-conflict era of Sierra Leone to comprehensively address the critical challenges and interrelationships between population and development, and to catch up on what the rest of the world was striving to achieve when the country was busy trying to put the war behind it.

The implementation of this policy established a common ground, with full respect for various religions and ethical values and cultural backgrounds of the Sierra Leonean society.
With the overall goal of the 2015 Census aimed at contributing to the improvement of the quality of life of the people through providing the government and other stakeholders with relevant, reliable and timely data, the specific objectives were to:

(i) increase the availability and accessibility of accurate, timely and reliable data on demographic and socio-economic characteristics for evidence-based decisions, policy formulation and monitoring and evaluation of development frameworks at national, sub-national and sectoral levels;
(ii) increase knowledge of stakeholders at all levels, on population characteristics, patterns and trends;
(iii) increase utilization at all levels of data and information for designing, monitoring and evaluating development programmes and plans;
(iv) strengthen national capacities in data collection, processing, analysis, dissemination and utilization, including geographic information system (GIS), socio economic as well as in census strategic planning and management and hence to provide community level data on the incidence of Ebola and use the data in post-Ebola recovery activities.

1.5.2 Justification

The 2015 Census was undertaken to maintain a major data collection programme and provide necessary data required for formulation, implementation, monitoring and evaluation of programmes in population and housing policy, development, economic planning and good governance. Implicitly, information generated from the 2015 Census will serve various purposes such as in evidence-based decision making, policy formulation, planning and administration.

The 2015 Census would not only provide essential information for policy development and planning, but would as well manage and evaluate programme activities across a broad range of sectoral applications, which would monitor the overall development progress due to its ability to accommodate larger number of variables.

1.6 Funding and implementation strategy

A census requires substantial financial, material and human resources. Because of the Civil War, the Sierra Leone Government had to play a greater leadership role than in previous censuses as a confidence building measure for foreign donors. It demonstrated leadership by providing funding for the locality listing exercise, which started in January 2013. The Government also provided funds for the purchase of vehicles, office and data processing equipment, needed for the start of cartographic field work.

Donors started coming on board after they were satisfied that the security situation had improved to a level that could justify their confidence. The Government was supported by the United Nations Population Fund (UNFPA), United Kingdom Department for International Development (DFID), Irish Aid and the United Nations Development Programme (UNDP) in funding the census.

To ensure adherence to the work plan, the census activities were monitored through regular meetings, field visits and preparation of relevant reports. For successful implementation, the process was divided into five phases namely the preparatory phase, whose key activity was the cartographic and listing exercise followed by the data collection, data processing, data analysis and the evaluation and dissemination phases. Details of the above phases are further explained in other chapters, especially in the methodology section.

1.7 Census methodology

1.7.1 Introduction

The census methodology, whose focus was on pre-enumeration, actual enumeration (field work) and post enumeration activities, was done as best international practice. The objectives were:

(i) to ensure that the lowest administrative units (enumeration areas) were clearly demarcated through a well-structured cartographic mapping exercise without dispute amongst local communities;
(ii) to ensure that field staff were fairly recruited to perform their duties;
(iii) to have trained staff for pre-enumeration, main data collection and post-enumeration activities; and
(iv) to ensure that quality assurance was achieved through effective monitoring and supervision activities.

1.7.2 Pre-enumeration activities

Pre-enumeration activities involved:

(i) the establishment of the legal basis for the census;
(ii) setting up the necessary administrative/ organizational machinery;
(iii) establishment of a cartographic mapping programme;
(iv) determination of the scope and coverage of the census, including preparation of relevant instruments; and
(v) the development of census education and communication programmes.

1.7.2.1 The legal basis for the census

The 2002 Statistics Act and the 2002 Census Act provided the legal authority for the 2015 Census. The legal provisions in these two acts are consistent with the objectives and strategy of the 2015 census programme and therefore facilitated the census operations. In addition, the 2014 Public Health Emergency Regulations, put in place for the containment of Ebola, was repealed. These regulations had been part of the reason for postponing the census from December 2014 to December 2015.

1.7.2.2 Establishment of the census administrative structure

The Statistician General (SG) of Statistics Sierra Leone (SSL) has the responsibility under the 2002 Census Act for 'the direction of the overall technical and administrative control of the taking of any census'. To exercise this responsibility, a Census Secretariat (CS) was set up for the 2015 Census.

The existing legal basis for population censuses also made provision for the appointment of a Census Advisory Committee, whose chairman was the minister of Finance and Economic Development. The Census Advisory Committee (CAC) provided policy guidelines, mobilized the necessary resources for the census, and generally acted as the link between the Government and the CS.

District census offices were also established at district administrative headquarters and operated in close contact and cooperation with the existing district statistical offices. The district census offices formed the field arm of the CS and were headed by district census officers (DCOs).

Provision was also made for consultancy support or UNFPA technical backstopping in the following areas: census organization; census cartography and mapping; census quality control and evaluation; census communication; data processing/data base management; and data analysis/dissemination.

1.7.2.3 Census Secretariat and committees

Conducting a census requires developing a clear census management framework which outlines the census management structures, the key activities, responsibilities and critical dates, as well as capacity enhancement and resource mobilization. This structure clearly outlines the supervisory and implementation responsibilities of the various stakeholders.

1.7.2.3.a The Census Secretariat

SSL had direct responsibility for implementing the 2015 Census. The Statistician General was therefore the Chief Census Officer (CCO). SSL initiated the legal basis for undertaking the census through a legal notice that was published in the Government Gazette, in accordance with the Census Act. The implementation of census activities was done through the establishment of the CS, whose membership included but was not limited to: the chief census officer; census programme manager; census field operations coordinator; finance officer; public relations officer; data processing officer; human resources officer; district census officers; and a secretary.

The CS brought together all the heads/technical personnel of key sections in SSL (including GIS/cartography, census, data processing, economics, administration/finance). The CCO chaired the Secretariat meetings.

The key responsibilities of the Secretariat were to monitor and evaluate the implementation of the census activities. In particular, the Secretariat:

(i) provided day-to-day professional, technical and administrative support;
(ii) mobilized and ensured proper usage of resources for the census;
(iii) provided secretarial services to the Census Advisory and Technical Committees (CATCs);
(iv) spearheaded the development of census instruments; supervised the design and production of census maps;
(v) the recruitment and training of census personnel;
(vi) the procurement, dispatch and receipt of all census equipment, materials and instruments during the enumeration exercise;
(vii) developed a tracking system and supervised data processing, analysis and dissemination of census results;
(viii) developed quality assurance guidelines and monitoring mechanisms and terms of reference for technical assistance where necessary;
(ix) drew up the agenda for the CTC and liaised with the Chief Technical Adviser (CTA) and other technical experts;
(x) coordinated the district census offices and all stakeholders; and
(xi) provided necessary link and updates to the Government and development partners/donor agencies.

The CS hosted the CTA and all other technical advisers, and was represented in both the CAC and CTC. It had several units responsible for the implementation of procurement, logistics, publicity materials development and testing and the district census offices.

(i) District census offices

The district census offices were the outreach units of the CS and coordinated all pre-enumeration, enumeration and post enumeration activities in the districts. This ensured better supervision of census implementation by the CS. They worked in close collaboration with the district statistics offices, local councils, paramount chiefs, and administrative district officers.

Specifically, the responsibilities of the district census officers were to: provide oversight support to district census activities; provide support for publicity and advocacy activities within their respective districts; make security arrangements in their respective districts; ensure the safety of all census materials and instruments in the districts; and provide logistical support during recruitment, training and enumeration and payment of field staff.

(ii) Technical experts

Technical experts were appointed in the Census Secretariat through cooperative arrangements of SSL and UNFPA, responsible for all technical tasks pertaining to the 2015 Census.

They included the CTA responsible for all census activities; the cartography/GIS, data processing, communication and publicity experts; and other national experts.

SSL professional officers, referred to as Technical Coordinators (TCs), were responsible for facilitating the districts on census technical matters during the pilot, the main census enumeration and the post-evaluation census activities. The TCs were also responsible for the training of district census officers, field officers, supervisors and enumerators.

1.7.2.3. b Census committees

(i) Census Advisory Committee (CAC)

The CAC comprised high-level representatives of relevant stakeholders from the public sector, development partners and civil society. The minister of Finance and Economic Development was also the chairperson of this Committee. The CAC formulated census policies in collaboration with stakeholders; lobbied for and mobilized resources from the Government, development partners and private sector; provided leadership that guided successful execution of the 2015 Census; and liaised with all stakeholders to provide the required support to the census.

(ii) Census Technical Committee (CTC)

Under the direction of the CCO, the committee included the technical units/sections at SSL, various MDAs, the University of Sierra Leone, Njala University, National Population Commission, civil societies and development partners and donor agencies like the United Nations Country Team (UNCT), DFID, EU, World Bank, African Development Bank (ADB).

The committee was charged with all the technical aspects of the 2015 Census, guided by inputs from the CAC. It was the responsibility of this committee to review all the census instruments, which included questionnaires, manuals and control forms. Specifically, the committee's duties were to:

(i) review and finalize the census project document and the census instruments;
(ii) recommend the best practices for preparatory activities, data collection and processing; and
(iii) ensure quality assurance guidelines and monitor and evaluate all the technical activities of the census at all stages.
(iii) Census Communication, Publicity and Advocacy Committee

The Census Communication, Publicity and Advocacy Committee (CCPAC) was responsible for information which would prepare the public for the census and make people aware that they must cooperate during the census enumeration. The specific roles of this committee were to:

(i) develop a communication, publicity and advocacy strategy and materials;
(ii) develop a strategy for disseminating census results;
(iii) prepare press releases and organize workshops, seminars and public meetings to inform the general public; and
(iv) train members of district publicity sub-committees.

The CCCAP worked closely with the other committees, for example, the CTC and the district publicity sub-committees, to incorporate technical aspects of the census in various publicity materials. It also kept the CAC informed of progress on matters relating to communication, publicity and advocacy. On the other hand, the CAC assisted the CCPAC to formulate policies and strategies to enhance fulfillment of its mandate.

1.7.3 The cartographic mapping programme

Mapping operations supported the census process at its three stages: pre-enumeration, enumeration and post-enumeration. Thus, at each stage, maps had specific functions with regard to census operations and various combinations of geospatial tools provided an added value to the mapping tasks at each stage.

In the pre-enumeration stage, the Census and the GIS Division prepared the enumeration area maps as a basis for counting, as accurately as possible, every household and person in a well-defined area during the enumeration period.

The use of available large-scale maps (including high-resolution satellite imagery) was therefore universal: first, to estimate the number of persons living in an area and their geographic distribution, and then to support the delineation of enumeration areas (EAs) and other census area units.

For this purpose, census mapping staff, in consultation with census planners and major census data users, had to undertake a complete and consistent partitioning of the national territory into hierarchical geographic units, with the enumeration area as the lowest level. The delineation of the boundaries of enumeration areas was consistent with the boundaries of administrative divisions and, to the extent possible, other existing natural or built reference features like roads, rivers or landmarks. Ultimately, the purpose was that they could be easily recognized by the enumerators.

The development of a coding scheme was necessary, assigning a unique code to each enumeration area. The code scheme reflected the administrative hierarchy and was flexible enough and well-structured to incorporate new and future administrative divisions. Unique identifiers, such as numerical values assigned to place names alphabetically and in a hierarchical order, to the boundaries of the enumeration areas, resulted in codes, referred to as 'geo-codes'. This permitted data to be linked geographically and displayed on a map, and therefore established a link between GIS boundaries and tabular census data.

At the enumeration stage, large-scale maps guided enumerators in identifying their assigned dwelling units and places where people were expected to be during the enumeration period of the census. In addition to their fundamental support during the census data collection, large and medium-scale maps helped supervisors coordinate the work of their enumerators and enabled them to react swiftly to any problems faced by the enumerators. These maps helped census technical staff monitor progress of the overall census operations across the country.
In the post-enumeration stage, maps were used to spatially analyze, present and disseminate census results to various users with specific needs. Also, geographic statistical database for administrative and aggregated statistical units was developed to carry out spatial analysis and to disseminate census results.

1.7.4 Field mapping activities

Maps are useful at the three stages of the census mapping process. Therefore, the initial efforts at the planning stage focused on the selection of the appropriate method for successfully accomplishing the mapping programme. Indeed, the national census mapping strategy needs to be determined on a country-by-country basis and requires a tailor-made approach that considers the following factors: size of the country; existing base maps; available financial resources; existing technical capabilities and trained staff; and a timeframe available to plan and carry out the census mapping process.

Sierra Leone, like many other countries, opted for a mixed approach that can use existing base maps along with existing digital maps that cover areas across the whole country. A gradual GIS-based solution, taking into account the current situation of cartographic work and focusing first on a well-defined goal, was more realistic and achievable in a reasonable period of time.

The Census and GIS Division of SSL produced hard copies of reference maps based on the administrative units of the country prior to going to the field to produce a new standard EA frame. These can be classified as district maps, rural chiefdom maps, section maps, urban layout maps and urban city maps.

Field mapping officers were trained and deployed to commence work at the district headquarter towns all over the country including Freetown, the capital. The mapping officers were generally trained to undertake a number of tasks namely: plotting and checking all administrative boundaries; updating the maps; plotting villages, trading centres, schools, roads and tracks with the Global Positioning System (GPS); naming physical features; checking spelling errors of place names; undertaking dwelling unit counts and household quick-counts; and demarcating EAs.

Based on the results of the household quick-counts, the teams demarcated EAs in the range of 80-120 households per EA. The range of 80-100 households was mostly applied to cities and other major urban communities while the range of 100-120 applied to rural communities. The range was lower for urban communities because the population was more likely to increase due to migration, prior to enumeration.

In addition to the field mapping officers, technical monitors were based in the regions (Northern, Southern, Eastern and Western) to technically oversee the work of the field staff, and to ensure that census mapping standards were met. More specifically, the monitors were required to: check the quality of work; redeploy field staff to subsequent section headquarter towns as and when necessary; to return completed maps and field control forms to SSL headquarters; and to ensure that regular supplies to field teams were assured. When maps, village lists and completed field control forms were returned from the field, they were edited and matched before being digitized, printed and distributed for enumeration.

1.7.4.1 Maps digitizing and preparation

The key steps to the map digitization and preparation included the following activities:

(i) Reviewing of field returns: maps and field control forms were reviewed to confirm consistency and quality control checks such as checking legibility, spellings, geographic codes and entry of GPS coordinates on the forms.
(ii) Scanning and data storage: ensuring proper analog record keeping and all field returns (base maps, sketches and forms) were booked.

The forms were placed in files and stored with their appropriate chiefdom labels and kept on shelves, and the base maps kept in individual map drawers for each district. The field returns (base maps, sketches and forms) were scanned. The scanned materials were stored in district, chiefdom and section folders which were created to facilitate systematic referencing of the mapping documents. In order to use the scanned raster maps for the map preparation, they were geo-referenced using Geographic Coordinate System WGS 84.

(iii) Data digitization and integration: various datasets were reviewed, re-projected, digitized, integrated, edited and verified to make them suitable for preparation of the final census maps.
(iv) Compilation of EA maps: EA maps were compiled using geographic layers such as GPS point data, administrative boundaries, EA boundaries, roads, swamps and rivers. A selection of symbols was done for the vector layers and a layout developed with elements including identification table showing administrative levels, names and geo-codes, map title, legend and description of urban EAs.
(v) Printing and management of maps: final EA maps were prepared on A3 and exported as PDF files which were then combined for fast printing. The merged PDF maps were then printed as coloured hard copy maps. The printed maps were verified against the database and organized by section (clipped) and districts (enveloped) and regions (parceled) before being ready for dispatch.

1.7.5 Development of census instruments

After the establishment of the CS, the Statistician General set up a Census Planning Group (CPG) which comprised the Deputy Statistician General and the directors of divisions at SSL, representatives from various ministries, the University of Sierra Leone and the Secretary, National Population Commission (NPC).

The CPG reviewed topics that have been investigated in previous censuses, procedures used and also held consultations with major data users in order to determine the topics to be investigated in the 2015 Census. Particular attention was paid to data required for policies and programmes relating to women, children, the youth and the physically challenged. The recommendations of the National Census Data Dissemination Seminar (NCDDS) and international and regional recommendations on the census were also considered in the exercise.

Following the consultations and review of the relevant materials, a number of documents were prepared and tested by the CS.

These included the preliminary evaluation and analysis plan (PEAL), tabulation plan, publication programme as well as the questionnaires and related documents and forms. Special attention was paid to the preparation of the publication plan and the evaluation programme.

Plans were also developed for a preliminary descriptive analysis of the census data. This plan formed the basis for the preparation of the census thematic reports that would be published along with statistical tables in the other census monographs. A group of analysts, comprising professionals of SSL and selected specialists of other government/private agencies and the Universities of Sierra Leone and Njala, were put together to do an in-depth policy-relevant analytical study of specific research themes using the census data. These individual themes would be published as monographs.

1.7.6 Pilot census implementation

As a rule of thumb in a well-coordinated scientific research (especially in larger surveys), a pilot census is undertaken to test the applicability and suitability of the questionnaire, the main instrument. A semi-completed questionnaire embracing the needs of all data users was administered to a sample population with regional bias. This is very important as a large amount of resources can be saved during the main enumeration if critical mistakes can be identified and solved at the pilot stage.

1.7.7 Acquisition and distribution of census materials

The acquisition of census materials was done during the pre-enumeration, enumeration and post enumeration stages. The acquisition of the census materials, as per the country's National Public Procurement Act (NPPA), starts with a tender or bidding process at a threshold purchase of any undertakings. Tender bids were put on daily tabloids at any time the Secretariat needed materials and, or logistics to facilitate the census activities. At the Secretariat, computers, stationeries and other working tools were bought to develop a conducive working environment. These materials were also allocated to the district offices. During pretest, enumeration and post-enumeration stages, questionnaires were printed through a bidding process and selection done on quality of printing, competitiveness in terms of cost and quantity produced as and when needed.
The distribution of materials during the three stages of data collection was also achieved through a robust logistic plan. Vehicles bought for SSL by donors together with hired vehicles were used to distribute census materials to the localities to be enumerated.

1.7.8 Census publicity and advocacy programme (education activities)

A comprehensive census publicity and advocacy programme was prepared by the Census Secretariat in collaboration with the Ministry of Information and Communications. The implementation of the programme involved the use of various strategies and media to address census messages to different audiences in the central government, regional/district administration, the local councils, chiefdoms, various interest groups and the general public. The aim of this exercise was to sensitise and motivate different population groups to ensure their effective co-operation and support in the various census operations and also to promote timely acceptance and extensive use of the census results.

To enhance public awareness and popularity of the Census, 18,000 extra posters, 70,000 fliers, 65 banners were printed and distributed in all districts, 9 billboards were designed and mounted in strategic areas in Freetown.

In addition, activities to increased awareness on the census by rural communities without media access were held. These include sensitization meetings with all the 149 Paramount Chiefs in the country,, Chiefdom Meetings with section chiefs and other community leaders, public meetings with various groups were also held especially in Freetown, announcements in Churches/Mosques, Census song by Artist for Census advocacy in schools were also carried out.

1.7.9 Recruitment and training of field staff

The CS was given a huge responsibility to carry out the process of recruitment and training of candidates for the main data collection. The main objective of the recruitment exercise was to ensure that suitable candidates were selected to fill the different categories of field staff required for the enumeration exercise from 5 to 19 December 2015.

Short-listing was done from 24 August to 1 September 2015 for the post of field officers, supervisors and enumerators. SSL, together with key stakeholders including the CTC and the UNCT, ensured that the process was properly guided to achieve the desired results. To commence the short-listing process, institutions including the UNCT, DFID, Irish Aid and Sierra Leone Association of Journalists (SLAJ) were invited by the CTC to observe the process and give their own advice.

An inaugural meeting was held between SSL and these representatives for briefing on the importance of recruitment of field staff and the need to work with stakeholders at all stages of the census activities. The guidelines, processes and procedures to be used in the conduct of the short-listing exercise were explained during this meeting as well as the formation of teams per district.

At the end of the meeting, a total of 15 teams comprising staff from various organizations formed the field staff application short-listing. Each district team comprised a minimum of seven members from the CTC, UNCT, SSL Management, SSL district census officers, SSL district statisticians, Ministry of Labour and SLAJ. The UNCT comprises nominations from World Bank, United Nations Human Rights Commission for Refugees (UNHCR), Food and Agricultural Organisation (FAO), United Nations Women, UNDP, World Health Organization (WHO), The Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Children's Fund (UNICEF) and UNFPA. In some district teams, there was more than one UNCT nominee whilst others had only one.

The 15 short-listing teams were responsible for short-listing census field staff including field officers, supervisors and enumerators for each district. Specifically the teams were responsible for ensuring that candidates were short-listed based on appropriate qualifications and on experience in statistical data collection. At the end of the exercise, the teams prepared and submitted a list of short-listed candidates for different positions and a report on the short-listing to the CTC.

Each team had a chairman and a secretary to help guide the work of the team. Also, each team had the opportunity of agreeing amongst team members the way the team functioned. The chairman of SSL Council and the UNFPA census technical team comprising the UNFPA Deputy Representative, the Chief Technical Adviser and the Cartographic Technical Adviser monitored the process.

The recruitment and training of field staff was done in two stages. The first stage was the short-listing requirements needed and recruitment process undertaken and the second stage was the training of field staff and the introduction of the listing exercise.

1.7.9.1 Short-listing requirements and recruitment

After the formation of the district teams responsible for the short-listing, adverts were made for each position. Applicants were required to possess relevant minimum qualification and work experience. Marks were allocated to all applicants who possessed the necessary academic qualifications. The possession of experience in statistical data collection was an added advantage that attracted more marks than possession of other experiences.

The documents which were made available to all members of each team during the process of short-listing exercise included: the 2015 Census field staff advert; district allocation for short-listing of field staff; time table for the shortlisting process; terms of reference for the short-listing teams; hard and soft copies of individual district applicants; grading forms and grading criteria used; qualifications needed; and location codes.

A total of 2,184 candidates applied for the position of field officers nationwide. Of this total, 484 were short-listed for interview and 240 were required and recruited to participate in the main data collection exercise. In the case of supervisors, a total of 9,221 candidates applied and 2,958 were short-listed to be interviewed, 15 per cent more than the required number. Only 2,569 were required and recruited to serve in this capacity.

Following the same recruitment process, a total of 42,135 candidates applied for the position of enumerator nationwide. A total of 13,502 were short-listed to be interviewed which was 5 per cent more than the required number. Only 12,849 were needed and recruited.

As was done for all categories (field officers, supervisors and enumerators), selection started at chiefdom or ward levels. These were later transformed into district aggregate following the selection criteria adopted by the selection committee devoid of any bias (see appendix for summary of 2015 census field staff).

1.7.9.2 Training of field staff and house listing exercise

The training of field staff was organized in all the 14 administrative districts and training centres and was distributed in consonant with the number of enumeration areas within wards, chiefdoms and districts respectively. The training started with field officers category for a considerable number of days. This was regarded as a 'trainers training'. The trained field officers assisted the district census officers and the technical teams from the head office to train supervisors and enumerators.

The training was conducted on the instrument (questionnaire) within two weeks and field staff dispatched to their respective enumeration areas. The house listing exercise as per census methodology started two to three days before the census night of 5 December 2015. A well-structured listing form, to be completed for each household, had the following indicators namely: province, district, chiefdom/ward, section and EA attributes.

1.7.10 Census enumeration

The enumeration exercise started immediately after the training, selection and deployment of enumerators in their respective enumeration areas. The process was marked by the observance of census night (the reference period for counting) from the night of 4 December 2015 at 7 p.m. to the morning of 5 December 2015 at 7 a.m. In order to capture and enumerate every person, trained enumerators on the use of the institutional population (special groups) questionnaire immediately started work during the census night. This special group included persons that spent the census night in hospitals, hostels, hotels or guest houses, border crossing points, airports and those found in the street. From 5 to 18 December, all household populations were counted using a household questionnaire. The two questionnaires (institutional and household) were used to ensure a comprehensive enumeration exercise and to avoid an undercount of the total population.
The institutional questionnaire collected information on the location of the population, age, sex, nationality and place of birth whilst the household questionnaire collected information on the general characteristics of the population (including relationship to the head of the household, literacy in any language, marital status, immunization, economic activity and the socioeconomic impact of Ebola). All the topics or modules covered were determined by the technical committee after two data user conferences.

1.7.11 Receipt of census material in the field

The census materials (questionnaires, training manuals, summary sheets and other materials) ready for fieldwork were distributed before or during training of field staff. These materials were transported to each district census office and distributed at the time of enumeration. Each field officer and supervisor took responsibility for distributing these unfilled questionnaires, field workers guides and summary sheets to their staff. The logistics arrangements including transportation were organized during this period, with priorities given to those travelling through rough terrain and to remote places.

1.7.12 Enumeration and field work

The field workers were deployed in all the census enumeration areas across the country to collect household data. This involved house-to-house visits using the household questionnaires. During the field work, enumerators first canvassed their EAs and listed the structures in the EA before actual enumeration. In rural areas, listings were done alongside enumeration due to the scattered nature of localities.

In addition, 94 enumerators were trained in the administration of the institutional questionnaire that involved prison officers, immigration officers, the police and the military, with an assignment to deal with a special type of population, mainly security personnel, hospital staff, the homeless and the transient.

The enumeration lasted for two weeks beginning on 5 and ending on 18 December 2015. . By 18 December 2015, the enumeration was completed all over the country, except for small portions in Freetown (Western Urban and Western rural). The period from 19 to 22 December 2015 was used for mopping up and verification across the country.

During the two weeks' enumeration period, the Census Command and Control Center met on a daily basis. The Command Centerwas made of the Minister of Finance and Economic Development (MoFED), Minister of State MoFED, The Statistics Sierra Leone (SSL) Council Chairman, The SSL Statistician General, the UNFPA Representative and the Census Chief Technical Advisor (CTA). This enabled on the spot decision making, such as deployment of more enumerators and mappers in the field and taking disciplinary action where field staff were not following instructions correctly.

1.7.13 Supervision and field monitoring

In order to ensure that quality data were collected during the census, four levels of supervision and monitoring of field staff were put in place. Firstly, a maximum of five enumerators were assigned to one supervisor. This supervisor traversed the five enumeration areas to observe interviews and recording of responses, as well as resolving any challenges that the enumerators might face during data collection.

The next level of supervision was the field officers. Each field officer was assigned to at least two supervisors and 10 enumerators and was responsible for checking all questionnaires edited by supervisors, to ensure that responses were recorded accurately and consistently. Where there were inaccuracies, the attention of the respective supervisor was drawn to correct such inaccuracies with the enumerator. The field officer ensured that all responses were recorded correctly, no question was left unanswered and all calculations and summaries were correct.

Above the field officers, two technical coordinators were deployed in each of the 13 districts (four in the Western Area Urban) to oversee the enumeration process and resolve any field challenges that might affect the process. In addition to the technical coordinators, 20 assistant technical coordinators and 26 mapping or cartographic staff were also deployed across the city of Freetown to assist in the enumeration of expanded EAs and to guide the enumerators in defining their EA boundaries respectively.

After the first week of enumeration, a census command and control centre was established to address any issues that might emerge from the field during the enumeration process. A census telephone 'hotline' was established to receive information from the public about areas that were yet to be enumerated. Such information was communicated to the respective district census officers for the attention of the field officers. The telephone hotline was effective in ensuring that EAs that were not enumerated at the time of enumeration were revisited and enumerated. This ensured the census had a wider coverage than any of the previous censuses conducted in the country.

The fieldwork was also monitored by a team of stakeholders which included SSL Council, the CTC, civil societies, the UNCTT and international monitors which comprised statisticians and demographers from the United Kingdom, Uganda, Malawi and Ghana.

1.7.14 Retrieval of census materials

Upon the completion of the enumeration, all census returnable materials (including unused and spoilt questionnaires) were compiled by the field staff and transferred to the district headquarter towns for verification by the district census officers.

Each completed questionnaire was checked for completeness of pages, and all EA summary sheets verified to ensure that entries and calculations were correct. All returnable materials were compiled, counted and quantities recorded in a material transfer form by each district census officer. They were then taken to the SSL headquarters for storage and security. On arrival at the headquarters, the materials were again checked by the officers receiving them for completeness as stated in the material form.

The retrieval of these census documents was a meticulous and delicate task to make sure that all census returnable documents were collected, listed and properly archived. The returnable documents included around 65,000 questionnaire booklets, 12,856 summary sheets, 16,000 maps, in addition to tens of thousands of other documents.

The retrieval of census documents was carried out from 22 December 2015 to 15 January 2016. No single questionnaire booklet was reported missing. However, a number of summary sheets and few maps were missing but had no impact on the census data quality. The missed maps were later retraced and new summary sheets were compiled from the completed questionnaires.

1.7.15 Post-enumeration activities (PEA)

The PEA started immediately after all census returnable materials had been received and stored at SSL headquarters. These involved a series of activities that culminated in the release of the provisional results, the summary of the final results and the writing of both analytical and thematic reports.

1.7.15.1 Recruitment and training of data processing staff

The recruitment and training of data processing staff involved two levels of staff: the office coding and editing staff at one level and the data entry and verification staff at the other level. The coding and office editing staff were responsible for editing selected items on the questionnaire and transforming them into numerical codes which were then entered into the computers. Eight coding supervisors and 80 coders were recruited to perform this task. Also 26 data entry supervisors and 260 data entry operators were recruited to enter and verify the census questionnaires into computer readable form.

All the categories of data processing staff were recruited after going through a rigorous selection process. Upon compilation of those who applied, 265 and 872 applicants applied for the office editor/coder and data entry/verify positions respectively. They were shortlisted based on the job requirements. The shortlisted applicants were taken through a series of tests on basic computer literacy and keyboard speed tests. Finally, 85 applicants were selected to be trained for the office editing position and 310 applicants for the data entry/verify position respectively. A 6-day training for the office editing/coding applicants started from 11 to 16 January 2016. They were taken through the census instruments and guidelines for editing and coding. At the end of the training, they were assessed and 80 of them were selected and given contract letters.

The training for the data entry/verify applicants was organized into three batches of about 100 applicants per batch. This was because the DP centre has 130 desktop computers installed for data capture. The training started from 8 February 2016 and ended on 20 February 2016. The training involved the introduction of the census instruments, data entry application and practical exercises on data entry and verification. At the end of the training, the trainees were assessed and 260 out of the 310 were selected for the job. The rest were placed on a stand-by list.

1.7.15.2 Data processing

The Data Processing Center

In order to process the census forms, the census data processing center was renovated and refurbished. With donor support, the following IT equipment was purchased to setup the center: 145 desktop computers, 6 Servers and accessories, 6 Laptops, 16 Air conditioners, 3 network printers, a canon photocopier, computer tables and swivel chairs, office furniture, etc. In addition, a 250 KVA generator was purchased to support the census activities.

The Data Processing activities

Data processing activities as a norm started with the coding of the census questionnaires and verifying the calculations of the EA summary sheets against the totals recorded in the questionnaires for the compilation of the provisional results.

The checking and verifying of EA summary sheets started immediately after the census materials were received at the census headquarters in Freetown. This was because the provisional results had to be released three months after the completion of the enumeration. When all EA summary sheets were verified and calculations were ascertained to be correct, they were then transferred to the data processing centre where the figures were entered and compiled to prepare the provisional results.

a. Manual editing and coding of the census questionnaire

The commencement of data entry started with the coding teams on 2 February 2016. There were eight teams of 10 coders per team and a supervisor. They operated a two-shift system of 40 coders per shift. Data entry for the main census questionnaires started on 24 February 2016.

The coding and editing clerks were responsible for checking the cover page of each questionnaire for the accuracy of geographic codes, population totals and the total booklets used in each EA. They were also responsible for checking the accuracy of the responses recorded for each item in the questionnaire, pick out any wrongly-coded geographical area and correcting such codes so that data from one geographical location would not be transferred to another. The questionnaires were designed using pre-coded items and a coding list of all variables was used during data collection to record all responses as numerical codes, where such codes were not provided for in the questionnaires. This was done to ensure the accuracy of the data collected and minimize errors in data entry.

The 260 data entry operators were grouped into 26 teams of 10 operators each with supervisors. They worked in a two-shift system; the first shift started from 8 a.m. to 2:30 p.m. while the second shift started from 2:30 p.m. until 9 p.m. They worked six days per week (Monday to Saturday).

b. Data capture and cleaning

This stage covered the conversion of coded data into computer readable form with on-line and identification checks. It took 260 data entry operators using 130 desktop computers in two shifts at SSL headquarters seven months. They were responsible for capturing the data from the questionnaires and saving the contents of each batch of questionnaires in the computers. A batch constitutes all questionnaires from an Enumeration Area (EA). Daily folders were created where the captured batch was copied for the supervisors to check against the hard copy of the questionnaire. All captured data were transferred to the census server and then saved in three back-up systems, including the Statistician General's Office.

A verification rate of 10 per cent was adopted. The operation was closely monitored and supervised by the data processing consultant and the data entry supervisors. The exercise started in March 2016 and was completed in September 2016. After the data capture, a three week edit specification workshop was conducted to develop techniques that would be adopted in editing and cleaning the census data. A consultant was hired to facilitate that process.

1.7.15.3 Post-enumeration survey (PES)

The PES was undertaken shortly after the main census in February 2016.

The main purpose was to measure the accuracy levels of the census results, especially coverage and content errors, as well as find the main sources of error.

It randomly selected 240 EAs using probability proportional to size across the country. This was based on a sampling rate of 1.87 per cent of the total EAs nationwide and this was determined by the quality control/evaluation unit of the CS. The sample was taken and the post-enumeration survey questionnaire designed so that it would facilitate matching exercise as well as subsequent calculation of estimates. The PES procedures and data collection instruments were pilot tested in a sample of purposively selected areas shortly after the pilot census. Based on the experience, necessary modifications were incorporated before finalizing the questionnaires for the main PES.

In order to maintain independence between the census and the PES, efforts were made to use people who were not involved in the census. In the event where this was not possible and people who were involved in the census were used, they were not allowed to work in the district where they worked during the census. The information from the PES questionnaires and the census questionnaires were matched after the PES data collection, followed by field reconciliation exercises. The calculation of the required estimates and the related sample errors was also undertaken.

The results of the PES revealed that the 2015 Census had high coverage and was of good data quality. The census coverage was estimated at 97.9 per cent, which was one of the highest coverage rates ever recorded in sub-Saharan Africa.

1.7.15.4 Data analysis, evaluation and dissemination

The analysis and evaluation of the census data was in accordance with the plans prepared at the census preparatory phase. Preliminary or provisional results were prepared in the form of tables by CS staff at SSL headquarters shortly after completion of the enumeration exercise. The tables provided information mainly on population and household distributions by local council areas, chiefdoms or wards and administrative districts. They were widely disseminated throughout the country. In December 2016, the final results were presented to Government and other stakeholders in a high-profile gathering, followed by a nationwide dissemination exercise.

The in-depth analysis and evaluation studies were carried out by selected specialists from various government departments as well as the Universities of Sierra Leone and Njala using census statistical tables produced by the SSL data processing division. The outputs were in the form of monographs. To maximize applications and analyses of the census and related data beyond the published tables, SSL has developed a data dissemination policy especially for the writers of the different monographs and other data users. Thus, there is greater access to census data at various levels of disaggregation, with due attention to issues of confidentiality of individual records.

The census data, therefore, would be disseminated not only by published reports as per the publication plan but also by maps, computer printouts, pen-drives and CD ROM on request, against the payment of an appropriate fee. Seminars would be organized as part of the strategy to promote effective and extensive use of the census data. The census communication and publicity programmes also included strategies to increase the use of census data.

1.8 Lessons learnt and challenges

The 2015 Census aims at providing information about the population in order to present a full and reliable picture of the population in the country in terms of its size and spatial distribution, demographic, social and economic characteristics, as well as housing conditions, to contribute to the improvement of the quality of life of the people of Sierra Leone.

The challenges and lessons learnt cover broader aspects such as the cartographic mapping exercise, quality control, recruitment processes, main data collection, field monitoring and supervision exercises.

This report has divided these broad challenges into key areas such as the management of the census; boundary disputes and issues of large EAs; recruitment and training; shortages of census materials; deployment of field staff and abandonment of work; storage of census materials; data processing; PES activities and the monitoring and supervision challenges encountered.

a. Management of census

The census management required substantial financial, material and human resources, which was a huge challenge. As the Sierra Leone economy is still not buoyant, the Government was initially constrained in starting the census process due to the huge financial support needed. In addition, the outbreak of the deadly Ebola virus during the census planning stage had a damning effect that led to the postponement of the census for one year. However, the Government then played a greater leadership role than it had in previous censuses and provided funds for the locality listing exercise. Funds were also provided for the purchase of vehicles, office and data processing equipment needed for the start of cartographic field work.

To have full census coverage, a comprehensive census publicity and advocacy programme was developed by the CS in collaboration with the Ministry of Information and Communications. The implementation of this programme involved the use of various strategies and media to address census messages to all stakeholders including the central government, regional/district administration, the local councils, chiefdoms, various interest groups and the general public.

The implementation of this activity had challenges, especially when the CS had a policy adopted that the publicity and advocacy had to be decentralized, leading to the expansion of the activity budget. The aim of this exercise was to sensitize and motivate the different population groups to ensure their effective co-operation and support and also to promote timely acceptance and extensive use of the census results. This was also a success, as strategies put in place were fulfilled with the small amount of funds available. In the main data collection, remunerations paid to field staff were inadequate when compared to the workload of staff. This resulted in some field staff abandoning their work after they had gone through the training. SSL had to recruit some additional staff to fill in positions that were abandoned. The workload for the recruitment and data collection in the Western Area Urban district was so huge that it could not be handled by a single district census officer.

The late provision of vehicles for field exercises posed serious challenge at the initial phase of field work. The delay in the payment of field supervisors affected their morale during the first week of enumeration. This resulted in some field staff not reaching their EAs before census night. The insufficient provision of transport and communication for supervisors to facilitate the monitoring process also posed some challenges.

The assignment of technical coordinators to all 14 districts to help DCOs was helpful in effective monitoring and coordination of fieldwork. However, there was not adequate fund to provide sufficient daily sustenance allowance (DSA) for technical coordinators.

b. Recruitments and training

The recruitment by the CS at both head office and the district offices were a challenge, including picking 15,658 required field staff from 53,540 applicants.

The period for the advert and selection of enumerators was very short and this formed the basis for shortfalls in the recruitment process. During the enumeration, ad-hoc recruitment of enumerators allowed many to collect and go away with large sums of money and census materials, as there were no proper records to identify them. This happened because some enumerators did not know who to report to. The ad-hoc recruitment also allowed applicants below academic standard (without requirement) to be involved in the enumeration exercise.

In the Western Area, there was no effective training of enumerators so as a result, some enumerators could not understand the questionnaires and so they were completed incorrectly (SSL Human Resources Department. 2015 PHC).

Another challenge was that the honorarium provided for the entire data collection exercise was so small that some staff abandoned their jobs.

The issue of ethnicity (spoken language) had not thoroughly been taken into account during recruitment. As a result, language barriers hindered the work rate of some enumerators and/or supervisors in the rural settlements and made the interpretation of the questionnaire to interviewees a challenge. Most enumerators had to find interpreters to complete the questionnaire in the language understood by the interviewees. For instance, Krio which is the most widely spoken language in Sierra Leone was difficult to understand by people in remote localities.

c. Boundary dispute and issues of large EAs

Boundary disputes within communities and issues of large EAs were key challenges. There were a few boundary re-arrangements, especially in the northern part of the country where two provinces have been created known as the North and North-West provinces and in other areas where some chiefdom boundaries had to be revisited.

There were some large EAs where enumerators could not complete data collection within the two weeks stipulated. This was due to an increase in the population after the one-year postponement of the census because of the Ebola outbreak. However, the presence of mapping teams in the field during enumeration helped enumerators identify their EA boundaries.

d. Shortages of census materials

With a well-structured logistics plan in place, the census was expected to be carried out smoothly. However, there were instances where there were not enough questionnaires, often because of an increase in the number of households initially targeted. Another challenge was the late arrival of field personnel and census materials, due to the difficulty in reaching some EA terrains. There were associated problems due to breakdown or unexpected mechanical faults (for example, vehicles and bikes) because of poor road situations.

e. Deployment of field staff and abandonment of work

During the cartographic work, deployment of mappers to unfamiliar terrains and districts was a challenge and created difficulty in mapping out EAs and localities. Some staff were also unhappy about having to travel to localities that they were not resident in. The cartographic work during the rainy season was also a major challenge as it slowed the pace of work.

The CS also noted that failure to compute telephone contacts and home addresses of staff in the recruitment process, had a negative effect during the data collection. The lack of record was also a serious challenge during short listing as people with the same name were assigned alternate positions as there was no clear identification on phone numbers and addresses of applicants. This situation made it impossible to locate some field staff who were working in large urban towns.

It was realized that Western Area Urban was too large for one district census officer, and as such it was difficult to control operations under a large unit. During the peak of the census enumeration in the Western Area, a series of issues concerning recruited staff trying to locate their areas of work arose. The major problem was the deployment of non-area staff that had difficulty in identifying EAs and localities. For instance, an enumerator resident in the eastern part of Freetown was posted to work in Lumley locality, a distance of over 20 miles with heavy vehicular congestion. This situation hindered the census enumeration not only because of the huge transportation costs but also the lack of willingness to do the job.

f. Storage of census materials

All census returnable materials including unused and spoilt questionnaires were compiled by the field staff and transferred to the district headquarter towns for verification. The completed questionnaires were checked for completeness of pages.

EA summary sheets were also verified to ensure that all entries and calculations were correct. Upon completion of the checks at the district offices, these materials were taken to the SSL headquarters for storage and security.

Challenges started at the time the census materials arrived at the headquarters, where they were again checked for completeness. If a number of summary sheets and maps were missing, new summary sheets would be completed whilst the missed maps were retraced respectively.

The other main challenge was inadequate storage of questionnaires from the field. The room allocated for storing the census field returns was not big enough to allow proper labeling and arrangement of questionnaires by their geographical identifications. This made the tracking and movement of census materials very difficult during processing. In future, large storage spaces should be allocated for census field returns with properly labeled shelves.

g. Data processing challenges

The main data processing challenge was the timely processing of census forms. The CS team was tasked to produce the final results within 12 months of field enumeration. Adequate measures were put in place for the recruitment and training of coding and verification teams, data entry operators and supervisors. A two-shift system was put in place, working six days a week.

However, a few months into the process, there were staff attritions due to several factors such as staff finding permanent jobs, going to school, and some becoming pregnant. In this regard, the CS had to find creative solutions for managing a continuous supply of personnel willing to work in all the shifts as and when necessary. The data processing department was also able to find modalities of recognizing and appreciating hard work. As a result, the data capture phase was completed one month earlier than the planned date.

h. PES challenges

Maintaining independence between the census and the PES was not effectively followed, as people who were involved in the census were used for the PES (although they had to work in a different district). The key reason was the time it would have taken to train new personnel to administer the questionnaire, which would eventually lead to additional expenditure.

The PES activity budget also had to be increased after the enumerators' pay was upgraded to prevent the problems experienced during the census collection period when workers left due to low pay.

i. Monitoring and supervision challenges

The overall outcome of the 2015 Census was satisfactory and generally good, according to the various monitoring teams including the International Monitoring Team (IMT), civil society, political parties and SSL Council. The monitoring and supervision started at the beginning of the cartographic mapping exercise and this continued during the buildup of the questionnaire prior to the pilot stage, census enumeration and PEA phases.

The cartographic mapping stage was constrained by: field mapping problems and data entry errors; poor maintenance of bikes and field vehicles; staff needing to learn GIS skills and their applications in census mapping; and unreliable internet which limited the use of online map resources.

At the questionnaire development stage, the challenge was how to word questions about indicators that would suit the Sierra Leone situation.

During census enumeration and PEA stages, error editing and consistency checks continued. Another challenge was that the monitoring and supervision team had to visit all selected areas and terrains, irrespective of its accessibility, take GPS coordinates and complete the monitoring and supervision forms allocated.

1.9 Summary, conclusion and recommendations

1.9.1 Summary

Sierra Leone lies on the west coast of Africa. It is bordered by Guinea to the north-east, Liberia to the south-east, and the Atlantic Ocean to the south-west.

The country has a total area of 71,740 km (27,699 sq. miles) and a population of 7,092,113 (based on 2015 Census). The country is made up of four administrative regions: the Northern, Eastern and Southern regions and the Western Area, which are subdivided into 14 administrative districts that comprise 19 local councils.

The 2015 Census was conducted between 5 and 18 December 2015 with reference to the night of 4 December as census night. Quantitative results were released in December 2016. An analytical report is among a series of publications that were released after the final results. The 2015 Census information would be used by MDAs, local councils, development partners and the private sector to monitor progress in the implementation of development programmes and policy formulation.

The 2015 Census methodology focused on pre-enumeration, actual enumeration (field work) and post enumeration activities and was done using best international practice. The objectives were to ensure that the lowest administrative units (EAs) were clearly demarcated through a well-structured cartographic mapping exercise without dispute amongst local communities; ensure that field staff were fairly recruited to perform their duties through a robust recruitment process; to have trained staff for pre-enumeration, main data collection and post-enumeration activities and make sure that quality assurance was achieved through effective monitoring and supervision activities. The aim was to provide information about the population in terms of its size and spatial distribution, demographic, social and economic characteristics, as well as housing conditions, that contributes to the improvement of the quality of life for the people of Sierra Leone.

Though the 2015 Census was successfully conducted, there were challenges in the areas of the management of the census; boundary disputes and issues of large EAs; recruitment and training; shortages of census materials; deployment of field staff and abandonment of work; storage of census materials; data processing; PES activities and monitoring and supervision; but these were mitigated with appropriate solutions.

1.9.2 Conclusion

The 2015 Census offered increased availability and accessibility of accurate and reliable data on a wide range of demographic and socio-economic characteristics of the population for evidence-based decisions at national, sub-national and sectoral levels. It would also support developmental programmes such as the Agenda for Prosperity (PRSP 2006), the Sustainable Development Goals (SDGs), the Sierra Leone International Benchmarks Systems (SLIBS) as well as the elections processes.

The census process followed international standards and best practice by establishing governance structures that involved various committees like the National Advisory Committee (responsible for policy direction), Technical Committee (responsible for all technical guidance, vetting all census instruments) and the Publicity Committee (responsible for census education and advocacy). In addition, the decisions of these committees were reviewed on timely basis and were approved by the SSL Council before implementation.

A census requires substantial financial, material and human resources. The Sierra Leone Government played a greater leadership role than it had in previous censuses as a confidence building measure to attract foreign donors. This was demonstrated by providing funding for the locality listing exercise and purchase of vehicles, office and data processing equipment needed for the start of cartographic field work. The Government was, however, also financially supported by UNFPA, DFID, Irish Aid and UNDP. The intensive cartographic and mapping exercise ensured that EA and locality boundaries are clearly demarcated. Recruitment and training processes, monitoring and supervision for quality assurance and data collection strategies used during data collection boosted the census's methodological approach. The success of these exercises re-affirms transparency in the entire census process.

1.9.3 Recommendations

Census coordination among the different players such as donors, political parties, traditional leaders, civil society groups and the ed by NEC.

CS (CCPACs) should be intensified to mitigate emerging issues as fast as possible. The dialogue between the SSL and National Election Commission (NEC) should be improved, as SSL provides information used by NEC.

The re-demarcation of district boundaries and identification of EAs and chiefdom boundaries should be reviewed regularly, not only at the time of the census, as this will avoid border disputes within communities.

The role of cartography in enumeration and data processing is crucial and collaboration between office operations and cartographic field work therefore needs to be improved.

Due to the wide geographical nature of the census process, especially at the time of enumeration, robust logistics plans to distribute census materials need to be adopted to avoid unnecessary delays in materials reaching the localities.

Issues of technology in data processing, planning and budgeting had challenges. The recruitment and training of data processing staff plays a key role in achieving quality data. There were lapses in both recruitment and training of field staff and data processing staff. The review of the recruitment processes and the strategy to intensify training would be necessary as this would help field and data processing staff understand their work.

Office/storage space challenges have been an issue at SSL. To ease the problem, large storage spaces should be allocated with properly labeled shelves for census field returns.

The allowances and remuneration for future censuses or large data collection activities should be based on the current economic trend of the country, to reduce officers leaving their posts at the peak of the enumeration exercise.

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CHAPTER 2: EVALUATION AND ADJUSTMENT OF AGE–SEX DATA

2.1 Introduction

Census data on age and sex are very important in demographic analysis, as well as in socio-economic planning and service delivery. However, they are affected by errors arising out of age-selective under-enumeration, digit preference and age misstatement especially among the older persons.

Overtime, several efforts have been made to minimize age reporting errors, but the problem continues to exist. Having realized this problem, it is recommended that data quality is evaluated to provide data users with information to build their confidence, while utilizing the data and explaining errors in the census results.

The evaluation of census results should be designed to serve one or more of the following main objectives:

(i) to provide users with some measures of census data quality to help them interpret the results;
(ii) to identify as far as is practicable the types and sources of error, in order to assist the planning of future censuses; and
(iii) to serve as a basis for constructing a 'best estimate' of census aggregates, such as the total population, or to provide census results adjusted to take into account identified errors.

2.2 Sources of data on sex and age

The sex of a person is likely to be collected with less reporting errors, compared to the other characteristics of the population. The major problem relating to the quality of the data on sex collected in censuses concerns the difference in the completeness of coverage of the two sexes. The 2015 Census collected information on the sex of every household member and residents of institutions, by asking the question 'Is this person male or female?'. To avoid errors of misclassification, the enumerators were trained to 'not guess from the name and relationship, which sex the person is and to be careful in dealing with names that are shared by both sexes'.

The information on the age of all persons in households and institutions was collected by asking for 'age as at last birthday (completed years)'. In cases where the age was not known, special efforts were made to estimate the person's age by using a national events calendar and relating the person's age to an event in the calendar.

Sierra Leone conducted its first scientific census in 1963, and subsequent censuses were held in 1974, 1985, 2004 and 2013. All five censuses were held on a de facto basis, and therefore the information from the censuses is comparable. Comparisons of the 2015 census indicators have been made with those of the previous censuses. The indicators were computed from the primary data using the same formula as was used on the 2015 data. Therefore, some indices may differ slightly from those in earlier publications.

2.3 Analysis of sex ratios

The sex ratio is a tool used for evaluating the quality of census data on sex because of the relatively limited variability of the national sex ratio and its independence of the absolute size of the population.

The sex ratio is computed as:

$$SR = 100 * Pm / Pf$$

where:
SR = sex ratio
Pm and Pf are the male and female population respectively.

2.3.1 Sex ratios, 1963 - 2015

In general, national sex ratios tend to fall in a narrow range from about 95 to 102, unless the population experienced some unusual circumstances, such as a history of heavy war losses or heavy immigration.

National sex ratios outside the range of 90 to 105 are to be viewed as extreme. 'Young' populations and populations with high birthrates tend to have higher overall sex ratios than 'old' populations and populations with low birthrates because of the excess of boys among births and children and the excess of male deaths at the older ages. The results of the five population censuses of Sierra Leone are given in Table 2.1.

Table 2.1 Sex ratio and total population by sex, 1963 - 2015

Census year	Total	Male	Female	Sex Ratio
1963	2,180,355	***	***	
1974	2,735,159	***	***	98.8
1985	3,515,812	1,735,163	1,780,649	98.7
2004	4,976,871	2,420,218	2,556,653	94.2
2015	7,092,113	3,490,978	3,601,135	

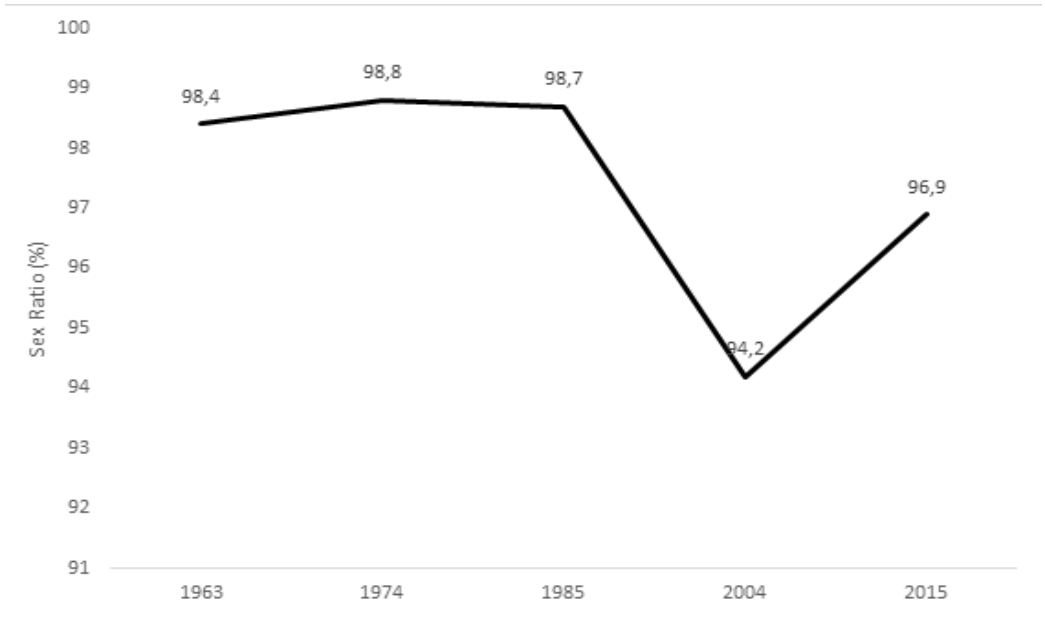
Source: Statistics Sierra Leone, 2015 Population and Housing Census

*** Information not available

The 2015 Census gave an overall sex ratio of 96.9 males per 100 females, implying three per cent fewer males than females. Figure 2.1 shows that the sex ratios from the 1963, 1974 and 1985 censuses were close to 100 per cent. However, there was a drop in the sex ratio in the 2004 Census. This is possibly because of the Civil War (March 1991 – January 2002), which might have led to excess male deaths compared to the female deaths.

The 2015 sex ratio was higher than that of 2004 by nearly three percentage points, reflecting that the sex composition of the total population was returning to the situation prior to the war.

Figure 2.1 Sex ratios of the population, 1963-2015



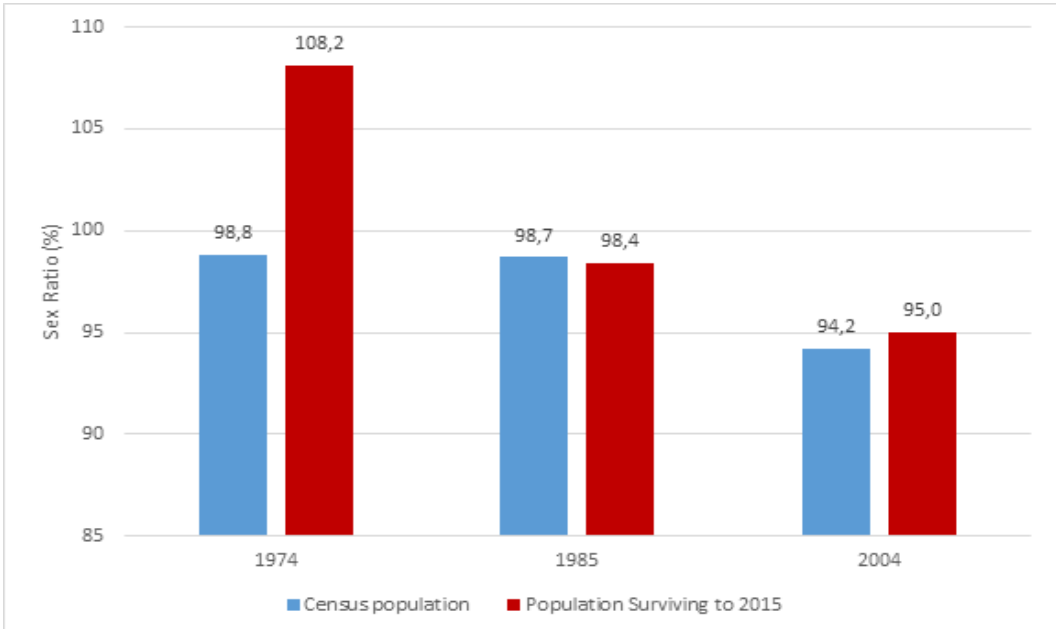
2.3.2 Sex ratios of surviving census population

Another approach to comparing sex ratios would be to compare the sex ratio from the previous census with that of the surviving population in the current census. The sex ratios from the 2004, 1985 and 1974 censuses would be compared with those who were still alive in 2015, that is those in the 2015 census population who are aged 11 years and over, 30 years and over and 41 years and over respectively. In the absence of heavy sex-specific mortality or migration, a significant difference would point to age misreporting.

Figure 2.2 shows that the sex ratio of the survivors from the 1974 census population (108.2) was much higher than for the 1974 census population. This is unexpected given that there is higher male mortality and more males than females died in the war, which would be expected to result in a lower sex ratio for the survivors.

On the other hand, the sex ratio from the 1985 census population was close to that of their survivors in 2015. The sex ratio of the survivors from the 2004 Census was slightly higher than that from the 2004 Census. This is contrary to expectation and therefore points to existence of errors in the age data.

Figure 2.2 Sex ratios of the census population and the survivors to the 2015 census, 1974–2004



Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, 2004 Population and Housing Census
National Statistics Office (Sierra Leone), 1985 Population and Housing Census

2.3.3 Sex ratios for the population in five-year age groups

Sex ratios for the population in five-year age groups vary widely from the sex ratio for the total population. For many analytic purposes, this variation may be considered the most important. The coverage of males and females is likely to be different in a census and between censuses. Age-specific sex ratios tend to be high in the younger ages and then decline with increasing age.
The age specific sex ratio of a given age group (x+n years) is computed as:

$nSRx = 100 * nPx^m / nPx^f$

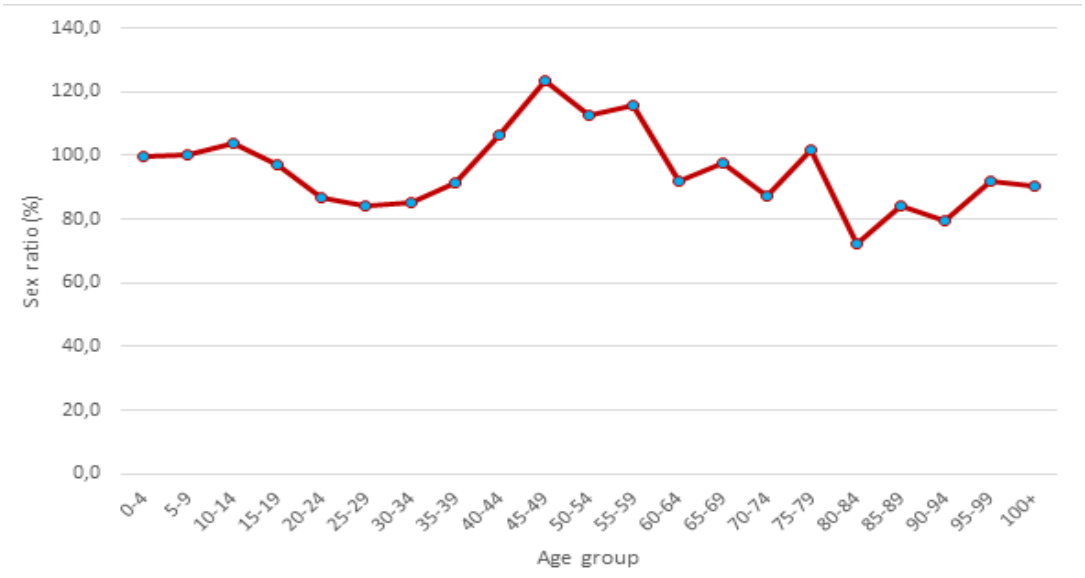
where:
nSRx refers to the sex ratio at ages x to x+n
nPx^m and nPx^f are the male and female population at ages x to x+n respectively.

The 2013 Sierra Leone Demographic Health Survey (SLDHS) showed a sex ratio at birth of about 106 males per 100 females. It also showed that females had higher survival ratios compared to males. This demographic pattern would result in the age-specific sex ratios being close to 100 males per 100 females in young ages and continuously declining as age increases.

Figure 2.3 shows the age-specific sex ratios (five-year age groups) from the 2015 Census. The sex ratios from 2015 don't follow the expected pattern. The age-specific sex ratios showed big fluctuations. The sex ratios in the age range 40 to 60 years were very high, more than 100 males per 100 females, and this is contrary to the expected demographic patterns.Despite the impact of the 11-year civil war, it is not possible to have such wide fluctuations. This therefore points to errors in recording of the sex information or sex-selective recording of the age data.

The overall sex ratio and the sex ratio of the survivors from the previous census show that the 2015 Census overall sex data were of reasonable quality and can be used for demographic analysis, planning and policy formulation. However, the age-specific sex data should be used with caution.

Figure 2.3. Age-specific sex ratios of the population



Source: Statistics Sierra Leone, 2015 Population and Housing Census

2.4 Detecting errors in age misreporting

Census data on age are characterised by two major types of errors namely, age-misreporting and age-selective under-reporting or over-reporting. The errors in age data arise from many factors including proxy reporting, which is commonly practised in population censuses; not knowing the actual age of an individual; inappropriate estimation methods; deliberate attempt to over or under-report a person's age; and a tendency to report ages ending with zero or five.

There are various techniques that can be used to assess the quality of age reporting. Demographic analysis and post enumeration surveys are widely used tools for evaluating the quality of census data. This report utilizes demographic analysis techniques to evaluate the quality of age and sex data: visual inspection methods, the population pyramid and indices of digit preference.

2.4.1 Visual inspection methods

A population that is characterized by high fertility and declining mortality, and has not in the recent past experienced disturbances such as wars, plagues and famines, is expected to have a typical structure. This shows a substantial proportion of the population in the younger ages which gradually declines with increasing age until the proportion becomes negligible in the older ages, such as 100 years.

2.4.2 Population of infants

In the ideal situation, the population of infants (aged less than one year of age) should be the largest. It should be close to the number of survivors from births in the 12 months preceding the census enumeration, assuming the net international migration of infants is negligible.

However, censuses are generally associated with under-reporting of population in the younger ages, especially infants (population aged '0' years). The population age '0' is more likely to be underreported for several reasons, for example, in some communities, '0' is not regarded as an age by many people. There is also a tendency for some parents not to think of newborn infants as regular members of the household. Therefore, it is given special treatment from the rest of the population.

The 2015 Census enumerated a total of 174,640 infants. However, the census reported only 83,418 births in the last 12 months of whom 73,762 were alive at the time of the census enumeration. The reported infant population is too low, indicating that the births were highly underreported and hence it is not used for evaluation of age data quality.

An alternative approach is to obtain the level of undercount of the infant population by combining the census information with data from other sources, such as sample surveys or civil registration systems. The fertility rates from the 2013 SLDHS were applied to the age distribution from the 2015 census (adjusted to the mid-period of the last 12 months) to obtain the expected number of births in the 12 months preceding the census enumeration.

The infant mortality rate from the 2013 SLDHS was used to obtain the central death rate for age '0' (1m0) to estimate how many of the births in the last 12 months were expected to survive up to the census enumeration.

The results of the above process are shown in Table 2.2. The table shows that 262,200 of all the births in the last 12 months were estimated to have survived up to December 2015. The estimated figure of 262,200 is higher compared to 174,670 population of infants who were enumerated and this gives an estimated undercount rate of about 32 per cent.

Table 2.2 Estimation of the undercount of the infant population

Indicator	value
Reported infant population	174,670
Estimated births	290,797
Infant mortality rate	0.092
Central death rate for age '0'	0.098
Estimated infant deaths	28,595
Estimated surviving births	262,202
Estimated under-reporting of infants	32.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

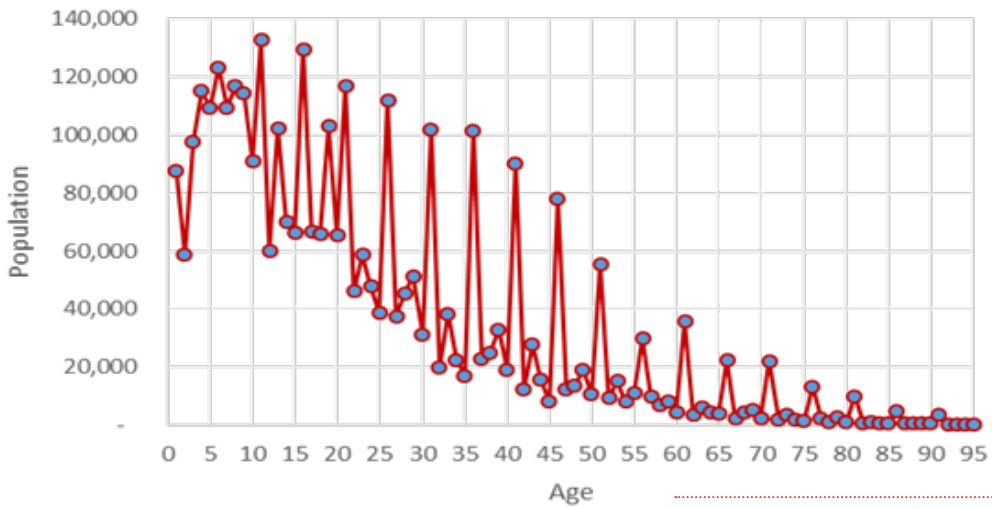
2.4.3 Population in single years of age

Data on age can be evaluated graphically by constructing a population pyramid by age or by constructing a graph of the number or proportion of individuals by age. Figures 2.4 and 2.5 show the single-age population for the male and female populations respectively.

The figures indicate that both the male and female populations did not follow the expected pattern of the population size declining gradually with advancing age. The population of infants was larger than the population aged one year, which is as expected. However, the infant population was smaller than the population in the subsequent single ages two through 10 years.

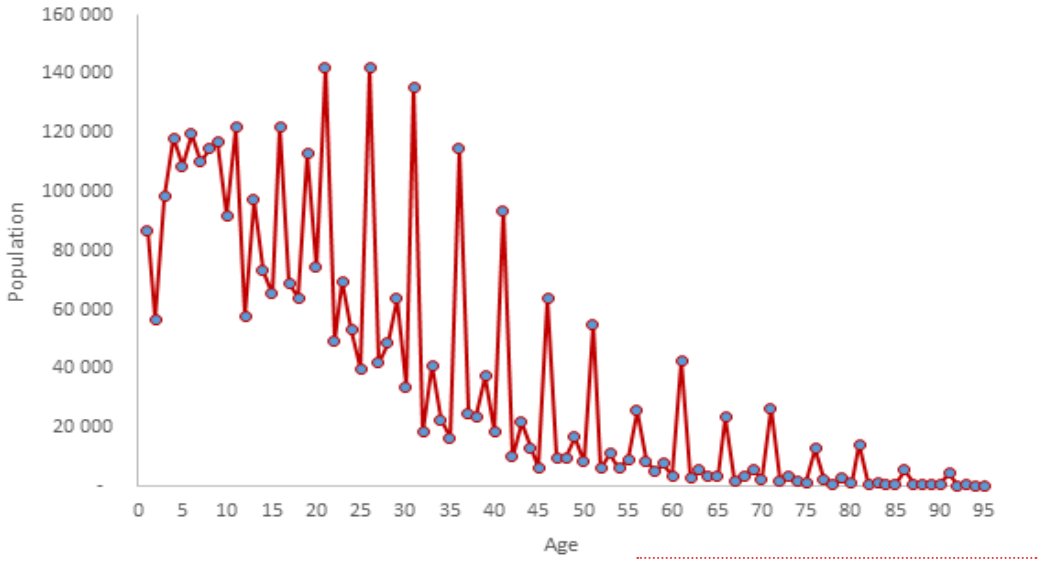
The many tall bars at regular intervals suggest age heaping, possibly due to digit preference. The patterns depict a tendency to give ages ending in certain digits, consequently avoiding others.

Figure 2.4 Male population by single years of age



Source: Statistics Sierra Leone, 2015 Population and Housing Census

Figure 2.5 Female population by single years of age



Source: Statistics Sierra Leone, 2015
Population and Housing Census

2.4.4 Population of extreme old age and centenarians

Census age distributions at advanced ages, judged as those aged 85 years and over, tend to suffer from serious reporting problems. This may be due to deliberate age exaggeration in older ages or a respondent misreporting the age of a household member due to ignorance of their true age. The most serious reporting problems have been found among persons reporting ages of 100 and over. This tendency, in part, is attributable to the desire to share in the esteem generally accorded extreme old age or from an ignorance of the true age.

Table 2.3 shows that 938,453 persons were enumerated aged 0-4 years, which was 15 per cent less than the population aged 5-9 years (1,108,715 persons). Such a situation can only happen if there was a recent and drastic decline in fertility levels.

Although the 2013 SLDHS reported a decline in the total fertility rate from 5.1 in 2008 to 4.9 in 2013, the decline is not large enough to bring about such a change in the age structure of the total population. This finding is further evidence of under-enumeration of the population aged 0-4 years.

It can also be seen in Table 2.3 that the 2015 Census recorded a total of 4,729 persons (0.07 per cent of the total population) aged 100 years or more, of whom 535 were aged 120 years or more. This is not consistent with a population with a life expectancy estimated at 50 years and it points to a deliberate or otherwise, exaggeration of the age of older persons.

Table 2.3 Distribution of the reported population by age and sex

Age Group	Number			Percentage			
	Total	Male	Female	Total	Male	Female	Sex ratio
All ages	7,092,113	3,490,978	3,601,135	100.0	100.0	100.0	96.9
0	174,670	87,566	87,104	2.5	2.5	2.4	100.5
1–4	763,783	381,526	382,257	10.8	10.9	10.6	99.8
5–9	1,108,715	555,292	553,423	15.6	15.9	15.4	100.3
10–14	847,292	431,588	415,704	11.9	12.4	11.5	103.8
15–19	873,620	430,792	442,828	12.3	12.3	12.3	97.3
20–24	662,819	308,135	354,684	9.3	8.8	9.8	86.9
25–29	607,983	277,618	330,365	8.6	8.0	9.2	84.0
30–34	434,203	199,964	234,239	6.1	5.7	6.5	85.4
35–39	421,172	201,459	219,713	5.9	5.8	6.1	91.7
40–44	299,215	154,121	145,094	4.2	4.4	4.0	106.2
45–49	242,188	133,783	108,405	3.4	3.8	3.0	123.4
50–54	186,793	99,050	87,743	2.6	2.8	2.4	112.9
55–59	110,449	59,261	51,188	1.6	1.7	1.4	115.8
60–64	112,682	53,987	58,695	1.6	1.5	1.6	92.0
65–69	73,722	36,414	37,308	1.0	1.0	1.0	97.6
70–74	65,568	30,606	34,962	0.9	0.9	1.0	87.5
75–79	39,728	20,044	19,684	0.6	0.6	0.5	101.8
80–84	31,359	13,177	18,182	0.4	0.4	0.5	72.5
85–89	15,888	7,258	8,630	0.2	0.2	0.2	84.1
90–94	9,984	4,430	5,554	0.1	0.1	0.2	79.8
95–99	5,551	2,662	2,889	0.1	0.1	0.1	92.1
100–104	2730	1253	1477	0.0	0.0	0.0	84.8
105–109	778	441	337	0.0	0.0	0.0	130.9
110–114	548	242	306	0.0	0.0	0.0	79.1
115–119	138	64	74	0.0	0.0	0.0	86.5
120 +	535	245	290	0.0	0.0	0.0	84.5

Source: Statistics Sierra Leone, 2015
Population and Housing Census

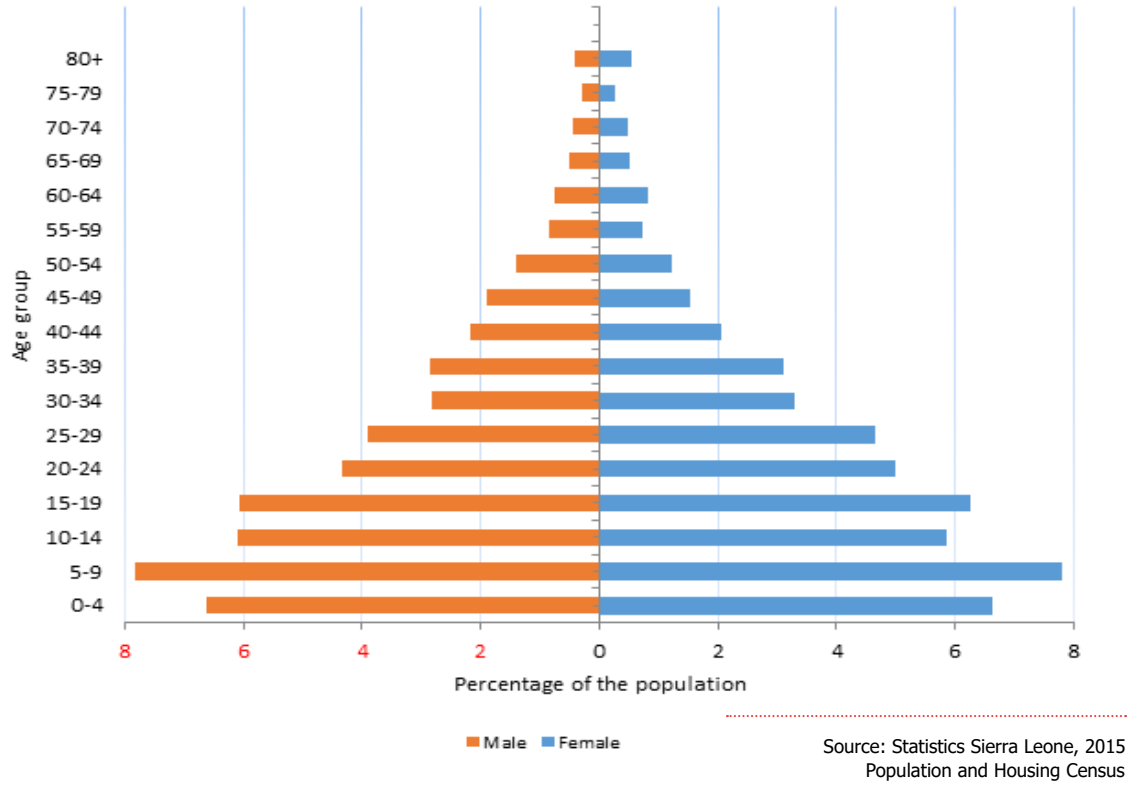
2.4.5 Population pyramid

A population pyramid is a vertically arranged bar-chart that shows the distribution of the population by age and sex. Population pyramids are a very effective and widely used pictorial presentation of the age-sex composition of the population. It gives a detailed picture of the age-sex structure of the population.

The population pyramid derived from the 2015 census data is given in Figure 2.6. The pyramid shows some anomalies, with the bars for the youngest age group (0–4 years) being shorter than those for the subsequent age group (5–9 years). When age data are grouped, the magnitude of age misreporting is minimized, since some of the age distortions are due to shifts within the same age group.

Shorter bars are also observed for the female population aged 10–14 years compared to those aged 15–19 years and the male population aged 30–34 years compared to those aged 35–39 years. Thereafter, the size of the bars decrease as the population increases. The existence of shorter bars for some of the younger age group confirms existence of age shifting or age-selective under-enumeration.

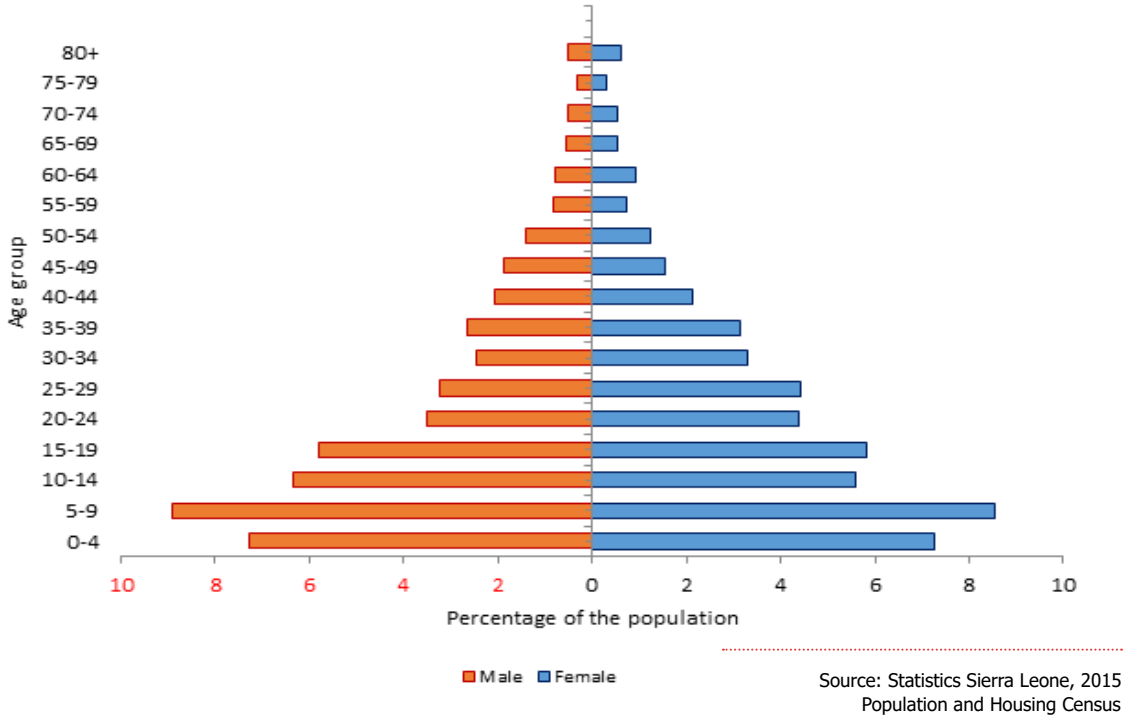
Figure 2.6 Pyramid of the reported population by age and sex



Source: Statistics Sierra Leone, 2015 Population and Housing Census

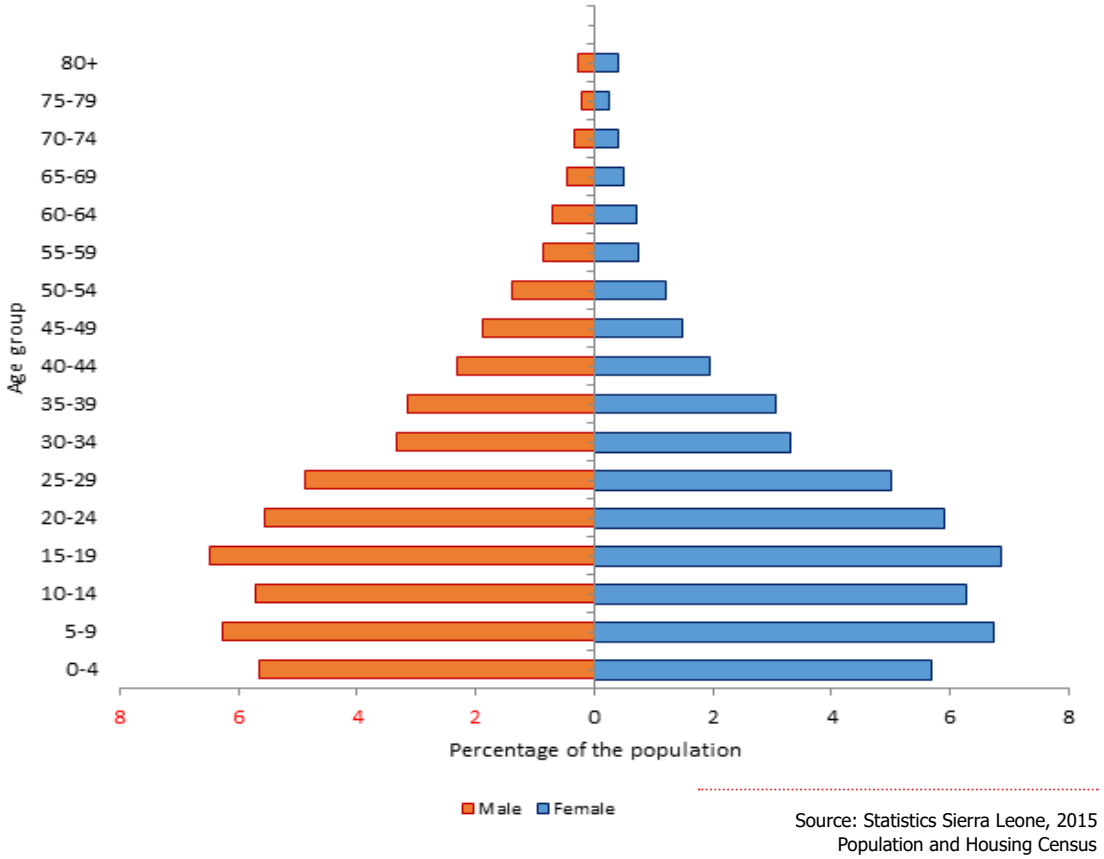
The population pyramids for the rural and urban areas are presented in Figures 2.7 and 2.8 respectively. The shape of the population pyramid for both rural and urban areas generally are the same as for the total population, with the bars for the age group 5-9 years being the widest band, while those for the subsequent bars reduce in size as the age increases. The major difference is that the bars for the younger ages were narrower compared to those of the rural areas while the reverse is seen in the older ages.

Figure 2.7 Pyramid of the reported rural population by age and sex



Source: Statistics Sierra Leone, 2015 Population and Housing Census

Figure 2.8 Pyramid of the reported urban population by age and sex



Source: Statistics Sierra Leone, 2015 Population and Housing Census

2.5 Measuring errors in age reporting

Digit preference is the tendency for a respondent to report, or an enumerator to estimate, ages ending in certain digits at the expense of other digits. This phenomenon is more common in communities with low education levels.

Although the patterns vary from community to community, the preference for ages ending in the digits '0' and '5' is widespread. The graphical methods used in section 2.4 were useful in showing the existence of age heaping. However, they are not good in quantifying the magnitude of the problem. This is better done using the indices of digit preference which are presented in this section.

2.5.1 Indices of digit preference

Several indices have been developed for measuring the extent of heaping on last digits. These indices assume the form of the true distribution of population by age over a part or all the age range. On this basis, an estimate of the true population number or numbers is developed and compared with the reported number or numbers.

The Whipple's Index measures preference or heaping on ages of multiples of five (ending in '0' and '5') between ages 23 and 62. It varies between one, if there is no concentration at all, and five, when there is maximum concentration.

An index of less than 1.1 implies that the data are accurate; 1.1 to 1.25 means that the data are approximate; 1.25 to 1.75 means the data are rough; while an index of 1.75 or higher means the data are 'very rough'.

The overall Whipple's Index measuring preference of either of the two digits (0 and 5) was 2.48 (Table 2.4), indicating that the age data from the 2015 Census are 'very rough'. The indices for males and females were 2.40 and 2.55 respectively. There are wide variations between the indices for rural areas (2.84) and urban areas (2.02). The rural-urban variations are observed for both males and female population.

The Bachi's and Myers' blended indexes are widely used to measure the extent of age misreporting in many populations. The Myers' blended method avoids the biases associated with the Whipple's Index that may occur upon the population age structure or distribution for reasons other than heaping or preference, owing to natural attrition due to mortality. Myers' blended index entails determining the proportion that the population ending in each digit ('0' through '9') is of the total population, by varying the starting age for any 10-year age group.

The Myers' Index shows high preference for ages ending in digits '0' and '5' (Table 2.4), and some mild preference for ages ending in digit '8'. The rest of the digits were avoided, with digit '1' and '4' being the most avoided digits. The results of the Bachi's Index are similar. However, the Bachi's Index shows avoidance for all ages except those ending in '0' and '5'.

The overall Myers' Index of digit preference is 49.9 and Bachi's Index is 31.6. All three indices of digit preference show that the quality of the age-data was poorer for females compared to the males, and for rural areas compared to urban areas.

Table 2.4 Whipple's index of digit preference by place of residence and sex

Index and terminal digit	Total country			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Whipple's Index									
0 and 5	2.48	2.40	2.55	2.84	2.77	2.90	2.02	1.99	2.06
Myer's Index									
Overall Index	49.9	47.2	52.4	61.9	58.9	64.6	34.7	33.3	36.1
0	12.9	11.8	14.0	16.6	15.1	17.9	8.3	7.7	8.9
1	-5.1	-4.8	-5.4	-5.8	-5.5	-6.1	-4.2	-4.0	-4.5
2	-1.3	-1.1	-1.5	-2.3	-2.1	-2.5	-0.1	0.0	-0.2
3	-3.9	-3.7	-4.0	-5.1	-4.9	-5.3	-2.3	-2.3	-2.2
4	-4.7	-4.4	-4.9	-5.5	-5.2	-5.8	-3.6	-3.5	-3.7
5	11.3	11.5	11.2	13.8	14.1	13.6	8.2	8.3	8.1
6	-3.5	-3.4	-3.6	-4.1	-3.9	-4.2	-2.7	-2.7	-2.8
7	-3.1	-2.7	-3.4	-4.0	-3.6	-4.3	-2.0	-1.7	-2.2
8	0.7	0.4	0.9	0.5	0.2	0.7	0.9	0.6	1.1
9	-3.4	-3.4	-3.4	-4.1	-4.2	-4.1	-2.4	-2.4	-2.4

Table 2.4 Whipple's index of digit preference by place of residence and sex (continued)

Index and terminal digit	Total country			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Bachi's Index									
Overall Index	31.6	30.0	33.0	38.4	37.0	39.7	22.5	21.6	23.7
0	17.0	15.5	18.5	21.3	19.7	22.8	11.3	10.4	12.2
1	-6.2	-5.8	-6.6	-6.8	-6.4	-7.2	-5.5	-5.1	-5.9
2	-2.1	-1.6	-2.5	-3.3	-2.9	-3.6	-0.4	0.0	-0.8
3	-4.5	-4.2	-4.7	-5.8	-5.6	-6.0	-2.7	-2.6	-2.8
4	-5.5	-5.3	-5.8	-6.5	-6.2	-6.7	-4.2	-4.1	-4.4
5	14.6	14.6	14.5	16.9	17.2	16.7	11.4	11.4	11.4
6	-4.1	-4.0	-4.2	-4.8	-4.7	-4.8	-3.2	-3.1	-3.2
7	-3.7	-3.3	-4.0	-4.7	-4.4	-5.0	-2.3	-2.1	-2.5
8	-0.7	-1.0	-0.4	-1.2	-1.5	-0.9	-0.1	-0.5	0.2
9	-4.8	-4.6	-4.9	-5.5	-5.3	-5.6	-3.9	-3.9	-3.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 2.5 provides a comparison of the indices for the 2015 Census with those of previous censuses. The Whipple's Indices show that the data from all three censuses were 'very rough'. All three indices show that the magnitude of age heaping in 2015 was close to that in 1985, but worse than that of the 2004 Census. The overall Whipple's Index in 2004 was 2.43 compared with 2.48 in 2015. There was more age heaping for females than males in all the three censuses.

Table 2.5 Trends in indices of digit preference by and sex, 1985 - 2015

Index	1985			2004			2015		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Whipple's	2.47	2.41	2.53	2.43	2.27	2.58	2.48	2.40	2.55
Myer's	51.5	49.1	53.7	46.2	41.6	50.3	49.9	47.2	52.4
Bachi's	31.7	30.3	33.0	29.5	26.4	32.4	31.6	30.0	33.0

Sources:
Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, 2004 Population and Housing Census
National Statistics Office (Sierra Leone), 1985 Population and Housing Census

Table 2.6 presents the overall indices of digit preference by region and district. The Whipple's Indices for all the regions were greater than 1.75 implying that the age data for all regions are classified as 'very rough'. Among the districts, the Western Area Urban district had the lowest Whipple's Index (1.68), thus its age data are categorized as approximate. The rest of the districts had their index bigger than 1.75, implying that the data were 'very rough'. Kailahun district had the worst quality of data with an overall index of 3.02.

Table 2.6 Indices of digit preference by region, district and sex

Region/ district	Whipple's index			Myer's index			Bachi's index		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total country	2.48	2.40	2.55	49.9	47.2	52.4	31.6	30.0	33.0
Eastern	2.80	2.72	2.87	59.1	56.7	61.5	37.7	36.1	39.2
Kailahun	3.02	2.95	3.08	66.2	63.6	68.7	41.9	40.9	42.9
Kenema	2.71	2.64	2.77	55.3	53.0	57.5	36.0	34.7	37.3
Kono	2.69	2.60	2.78	56.5	54.2	58.8	35.3	33.3	37.5
Northern	2.71	2.63	2.78	57.4	54.2	60.3	36.0	34.4	37.4
Bombali	2.50	2.42	2.57	51.4	48.2	54.3	32.0	30.4	33.5
Kambia	2.86	2.80	2.90	62.9	59.8	65.4	39.0	38.1	39.8
Koinadugu	2.75	2.71	2.79	57.9	56.1	59.6	36.6	35.9	37.2
Port Loko	2.68	2.58	2.76	56.4	52.6	59.9	35.6	33.5	37.3
Tonkolili	2.87	2.76	2.96	61.7	58.3	64.9	39.0	36.9	41.0
Southern	2.63	2.56	2.69	54.2	51.4	56.7	34.5	33.1	35.9
Bo	2.46	2.39	2.53	48.5	45.6	51.1	31.4	29.8	32.9
Bonthe	2.75	2.72	2.77	58.7	56.7	60.6	36.9	36.1	37.6
Moyamba	2.66	2.57	2.74	56.2	52.6	59.5	35.0	33.0	36.7
Pujehun	2.82	2.78	2.86	59.7	57.8	61.5	38.3	37.5	39.1
Western	1.76	1.76	1.77	27.7	27.1	28.3	17.7	17.4	18.1
Western Area Rural	1.98	1.97	2.00	34.0	33.1	34.9	21.5	21.3	22.5
Western Area Urban	1.68	1.68	1.68	25.2	24.8	25.7	16.2	16.0	16.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

2.5.2 Analysis of age ratios

The quality of census returns for age groups may also be evaluated by comparing age ratios. For this report, the age ratio is computed as the ratio of the population in the given age group to one-half of the sum of the populations in the two adjacent age groups, multiplied by 100. Thus, the age ratio for a 5-year age group, 5ARx is defined as follows:

$_5AR_x = 100 * {}_5P_x / ({}_5P_x\text{-}5 + {}_5P_x+5)$
where:
$_5AR_x$ refers to age ratio for ages x to x+4, and
$_5P_x$ refers to the population at ages x to x+4.

In the absence of extreme fluctuations in past births, deaths, or migration, the three age groups should form a nearly linear series, and the age ratios should then approximate 100 per cent. The age ratios serve primarily as measures of net age misreporting, not net census error, and they are not to be taken as valid indicators of error for age groups.

The age ratios in Table 2.7 show wide fluctuations from the 100 per cent, with the fluctuations of the female population being generally wider than those for the male population. The age ratios for the males were high in the youngest and oldest ages, and lowest in ages 40 to 55. Among the females, the fluctuations were very wide after age 55. These wide fluctuations are proof of age shifting, and that the age shifting was more among females than males, especially in the older ages. This may reflect ignorance of respondent's age.

The age ratios for rural areas had wider fluctuations compared to those for urban areas. The rural-urban differences of age ratios by sex are wider than the sex differences by place of residence. Therefore, place of residence has a bigger influence on the quality of age reporting than sex.

Table 2.7 Age ratios by age, place of residence and sex

Age	Total country		Rural		Urban	
	Male	Female	Male	Female	Male	Female
0-4						
5-9	123.3	125.1	130.9	133.1	110.2	112.7
10-14	87.5	83.5	86.2	77.7	89.7	92.2
15-19	116.5	115.0	117.6	116.8	115.0	112.8
20-24	87.0	91.7	77.5	85.6	97.8	99.4
25-29	109.3	112.2	109.1	114.9	109.5	108.9
30-34	83.5	85.2	83.5	87.8	83.5	81.7
35-39	113.8	115.8	116.3	115.2	110.9	116.8
40-44	91.9	88.4	91.8	90.7	92.2	85.2
45-49	105.7	93.1	108.7	91.8	101.7	95.1
50-54	102.6	110.0	103.2	110.8	101.7	108.7
55-59	77.4	69.9	74.4	65.9	82.0	76.4

Table 2.7 Age ratios by age, place of residence and sex (continued)

Age	Total country		Rural		Urban	
	Male	Female	Male	Female	Male	Female
60-64	112.9	132.7	118.2	144.8	105.0	114.5
65-69	86.1	79.7	83.4	74.9	90.9	88.8
70-74	108.4	122.7	113.8	130.0	98.6	110.5
75-79						

Source: Statistics Sierra Leone, 2015
Population and Housing Census

2.5.3 The United Nations age-sex accuracy index

The analysis in sections 2.3.5 and 2.5.2 have shown errors in reporting of the sex and age data. The United Nations age-sex accuracy index (AAI) is a combined measure of the accuracy of age and sex data. It is used to quantify the degree of errors in reporting of age and sex of the population, by employing age ratios and sex ratios simultaneously.

The sex ratio score (SRS) is defined as the mean difference between sex ratios for successive age groups, averaged irrespective of sign. The age ratio score, which is computed by taking the average deviation (without regard to sign) from 100 of the age ratios over all ages. The age ratio score is calculated separately for males (ARS_M) and females (ARS_F).

The age accuracy index is computed as:

$$AAI = 3(SRS) + ARS_M + ARS_F$$

Based on empirical analysis, if the AAI is less than 20, the age-sex distribution of the population is considered 'accurate'. If the AAI is between 20 and 40, the population structure is considered 'inaccurate'. For any AAI greater than 40, the population structure is considered 'highly inaccurate'. The age ratio scores, sex ratio scores and the UN age-sex accuracy index are presented in Table 2.8. The overall sex ratio score was 8.3 while the age ratio scores were 12.8 for males and 17.3 for females. This means that the quality of age data was worse for females compared to males. The age-sex accuracy index for Sierra Leone was 54.9 and hence the age-sex data for the 2015 Census are classified as 'highly inaccurate'. This finding agrees with what the other indices have shown.

Table 2.8 Age ratio scores, sex ratio scores and age accuracy index of the total population

Age	Age ratio		Age ratio deviation		Sex ratio	Sex ratio difference
	Male	Female	Male	Female		
All ages					96.9	
0-4					99.9	
5-9	123.3	125.1	23.3	25.1	100.3	0.4
10-14	87.5	83.5	-12.5	-16.5	103.8	3.5
15-19	116.5	115.0	16.5	15.0	97.3	-6.5
20-24	87.0	91.7	-13.0	-8.3	86.9	-10.4
25-29	109.3	112.2	9.3	12.2	84.0	-2.8
30-34	83.5	85.2	-16.5	-14.8	85.4	1.3
35-39	113.8	115.8	13.8	15.8	91.7	6.3
40-44	91.9	88.4	-8.1	-11.6	106.2	14.5
45-49	105.7	93.1	5.7	-6.9	123.4	17.2
50-54	102.6	110.0	2.6	10.0	112.9	-10.5
55-59	77.4	69.9	-22.6	-30.1	115.8	2.9
60-64	112.9	132.7	12.9	32.7	92.0	-23.8
65-69	86.1	79.7	-13.9	-20.3	97.6	5.6
70-74	108.4	122.7	8.4	22.7	87.5	-10.1
75-79					101.8	
Age ratio score			12.8	17.3		
Sex ratio score						8.3
Age-accuracy index						54.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 2.9 shows that the age ratio scores and sex ratio scores for the urban areas were much lower than those for the rural areas, implying that the quality of age-sex data is better for the urban than rural areas. This is consistent with findings using indices of digit preference.

Table 2.9 Male and female age ratio scores, sex ratio scores and age accuracy index of the population by place of residence

Place of residence	Age ratio score for males	Age ratio score for females	Sex ratio score	Age-sex accuracy index
Total country	12.8	17.3	8.3	54.9
Rural	15.8	20.8	11.5	71.1
Urban	8.5	11.9	6.5	40.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The age accuracy index was computed for the previous censuses of Sierra Leone. The data from the 1974, 1985 and 2015 censuses were re-grouped to the age groupings of the 2004 census data, whose oldest closed age group was 60–64 years. Table 2.10 shows that the age data for all the four censuses were classified as 'highly inaccurate' and the quality of age data was worse for females than males. The quality of the age-sex data in 2015 was poorer than that observed in 2004 (41.9) and close to that in 1985 (44.9). Therefore, despite improvements in the socio-economic conditions, the quality of the age data have remained poor.

Table 2.10 Age ratio scores, sex ratio scores and age accuracy index of the total population, 1985 - 2015

Census year	Age ratio score for males	Age ratio score for females	Sex ratio score	Age-sex accuracy index
1985	8.8	10.1	8.7	44.9
2004	9.1	10.3	7.4	41.9
2015	10.3	11.9	7.2	43.6

NB: The age and sex ratio scores for 2015 are slightly different from those in Table 2.4 because the data for 2015 were regrouped in line with the data for the previous censuses.

Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, 2004 Population and Housing Census
National Statistics Office (Sierra Leone), 1985 Population and Housing Census

2.5.4 Spatial differentials in quality of reporting age-sex data

The UNAAI was used to analyse regional and district differentials in the quality of the age data reporting. Table 2.11 shows that the Western Region had the best quality age-sex data with an AAI of 37.2 while the Eastern Region had the worst quality with an index of 78.5. The indices for the Northern and Southern regions were 59.4 and 6.6 respectively.

The Western Area Urban district had the lowest AAI (37.2), thus having its data rated as 'inaccurate'. The AAI for the rest of the districts were greater than 40, hence their age-sex data was rated as 'highly inaccurate'. Nine out of the 14 districts had age-sex data with an AAI higher than 60. The districts of the Eastern region had the worst quality of age-sex data with their AAI lying between 70 and 90. These are followed by districts in the Northern Region, while those of the Eastern Region had the best - although the quality was also not accurate.

Table 2.11 Male and female age ratio scores, sex ratio scores and UN age accuracy index of the population by region and district

Region/district	Age ratio score for males	Age ratio score for females	Sex ratio score	Age-sex accuracy index
Total country	12.8	17.3	8.3	54.9
Eastern	15.0	21.2	14.1	78.5
Kailahun	17.6	24.2	13.4	82.1
Kenema	14.7	19.8	12.3	71.5
Kono	15.1	19.7	17.5	87.2
Northern	15.3	18.9	8.4	59.4
Bombali	12.4	15.8	7.5	50.8
Kambia	16.5	20.6	9.9	66.6
Koinadugu	18.0	20.8	9.9	68.4
Port Loko	14.8	17.7	8.6	58.3
Tonkolili	16.9	22.3	10.2	69.8
Southern	13.8	18.6	9.7	61.6
Bo	12.3	17.0	9.4	57.5
Bonthe	15.0	19.0	9.9	63.7
Moyamba	13.0	16.9	10.5	61.4
Pujehun	17.2	23.3	12.0	76.6
Western	7.5	9.7	6.7	37.2
Western Area rural	7.1	11.8	8.4	44.1
Western Area urban	7.9	8.9	6.8	37.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

2.6 Adjustment of the age–sex data

The evaluation of the reported age-sex distribution of the population has shown that the data have some serious reporting errors. A close examination of the age-specific sex ratios (Table 2.3) showed fluctuations that could not be explained by demographic factors and were therefore attributed to the inferior quality of the age-reporting arising from differential age shifting by sex. Similarly, the population by age (single years or five-year age groups) do not show the expected distribution pattern. Therefore, there is a need for the data to be adjusted to remove the distortions. Adjustment of age-sex data entails applying scientific formulae to the reported data to produce a new age-sex distribution, on the assumption that there were distortions in the age data.

2.6.1 Considerations for selection of the method for the adjustment of the age–sex data

The technique used for adjusting the age and sex data depends on the perceived severity of errors in the age and sex distribution. The techniques for adjusting the reported age structures are classified into two major groups, namely slight smoothing and strong smoothing.

1. Slight smoothing, which gently modifies irregularities in the age structure;
    a. Techniques that keep the enumerated population within each 10-year age group;
    b. Techniques that modify the enumerated population totals.
2. Strong smoothing, which modifies most irregularities, some of which may represent facts instead of errors.

To maintain consistency with the rest of the census information, it is critical that the total population of each sex should be maintained as enumerated. Therefore, the techniques used for adjusting the age-sex data which preserve the original total enumerated population of each sex were preferred for smoothing the data. To achieve this, smoothing of the age data was done separately for each sex.

The U.S. Census Bureau (1994) developed a spreadsheet program (AGESMTH) which adjusts the population grouped in five-year totals using several techniques including Carrier-Farrag ratio method, Karup-King-Newton quadratic interpolation method, Arriaga technique that uses a second-degree polynomial and methods developed by the United Nations. The enumerated population was subjected to each of the above method.

The male and female populations adjusted by using the above methods are given in Tables 2.12 and 2.13 respectively. The findings show that the results from the light smoothing methods do not vary widely between the methods. This is in line with the theories behind the methods. The United Nations AAI was computed for the adjusted population and the findings are given in Table 2.14.

Table 2.12 Reported and adjusted male population by age and technique of adjustment

Age group	Reported	Carrier -Farrag	Karup-King Newton	Arriaga	United Nations	Strong
0-79	3,461,206			3,461,206		
10-69	2,386,172	2,386,172	2,386,172	2,386,172	2,408,005	2,386,172
0-4	469,092			527,667		536,474
5-9	555,292			496,717		487,910
10-14	431,588	461,268	458,604	460,992	467,687	438,479
15-19	430,792	401,112	403,776	401,388	402,119	384,702
20-24	308,135	320,786	321,686	319,763	330,215	325,425
25-29	277,618	264,967	264,067	265,990	261,020	275,703
30-34	199,964	218,485	219,327	217,852	215,856	225,844
35-39	201,459	182,938	182,096	183,571	188,721	187,981
40-44	154,121	160,620	159,147	159,481	161,448	154,774
45-49	133,783	127,284	128,758	128,423	130,612	125,521
50-54	99,050	90,538	91,499	90,214	97,161	96,577
55-59	59,261	67,773	66,812	68,097	64,660	74,958
60-64	53,987	51,596	51,929	51,343	49,557	55,039
65-69	36,414	38,805	38,472	39,058	38,950	41,169
70-74	30,606			29,121		29,779
75-79	20,044			21,529		20,871
80+	29,772					

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 2.13 Reported and adjusted female population by age and technique of adjustment

Age group	Reported	Carrier -Farrag	Karup-King Newton	Arriaga	United Nations	Strong
0-79	3,563,396			3,563,396		
10-69	2,485,966	2,485,966	2,485,966	2,485,966	2,512,128	2,485,966
0-4	469,361			531,539		533,256
5-9	553,423			491,245		489,528
10-14	415,704	450,754	450,374	450,567	457,375	445,537
15-19	442,828	407,778	408,158	407,965	414,128	400,234
20-24	354,684	369,750	367,811	369,011	374,354	356,074
25-29	330,365	315,299	317,238	316,038	312,300	306,384
30-34	234,239	255,037	253,948	253,309	252,683	251,956
35-39	219,713	198,915	200,004	200,643	204,731	204,022
40-44	145,094	145,373	146,438	144,649	152,589	153,212
45-49	108,405	108,126	107,061	108,850	109,031	118,401
50-54	87,743	77,856	79,309	77,817	82,001	87,300
55-59	51,188	61,075	59,622	61,115	59,495	67,626
60-64	58,695	53,575	53,269	53,237	51,139	53,478
65-69	37,308	42,428	42,734	42,766	42,302	41,741
70-74	34,962			32,427		31,597
75-79	19,684			22,219		23,049
80+	37,739					

Source: Statistics Sierra Leone, 2015
Population and Housing Census

Table 2.14 Age ratio scores, sex ratio scores and age-sex accuracy index of the reported and adjusted population

Method used	Sex ratio score	Male age ratio score	Female age ratio score	Accuracy index
Reported data	9.27	12.08	15.72	55.62
Light methods				
Carrier- Farrag	7.11	3.38	3.22	27.94
K.-King Newton	7.8	3.47	3.43	30.32
Arriaga	7.15	3.51	3.31	28.25
United Nations	7.51	2.85	3.07	28.45
Strong method	3.84	1.74	2.25	15.49

Source: Statistics Sierra Leone, 2015 Population and Housing Census

2.6.2 Adjusting the distribution of the total population by age–sex

The evaluation of the quality of the age-sex data showed the data were 'very rough'. However, this has been the same trend over time, as shown in Table 2.6. It is believed that some of the seeming irregularities may be real to the population. Therefore, use of strong techniques of adjustment is likely to produce an age-sex structure which is very different from the 'true' age distribution.

Having observed some under-enumeration of the population aged 0–4 years (Section 2.4), the Arriaga technique, which adjusts the population of all age groups including the 0–4 and 5–9 years, was deemed most appropriate for adjusting the 2015 census age-sex data. It should be noted that the population 80 years and above was not adjusted by the current technique, despite the earlier observation that its share to the total population (1.0 per cent) is not consistent with the country's demographic patterns. The adjusted population by age and sex is given in Table 2.15.

Table 2.15 Adjusted population and adjustment factors by age and sex

Age group	Adjusted population			Distribution			Adjustment factors		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	7,092,113	3,490,978	3,601,135	100.0	100.0	100.0	1.000	1.000	1.000
0–4	1,059,207	527,668	531,539	14.9	15.1	14.8	1.129	1.125	1.132
5–9	987,961	496,716	491,245	13.9	14.2	13.6	0.891	0.895	0.888
10–14	911,562	460,993	450,569	12.9	13.2	12.5	1.076	1.068	1.084
15–19	809,351	401,388	407,963	11.4	11.5	11.3	0.926	0.932	0.921

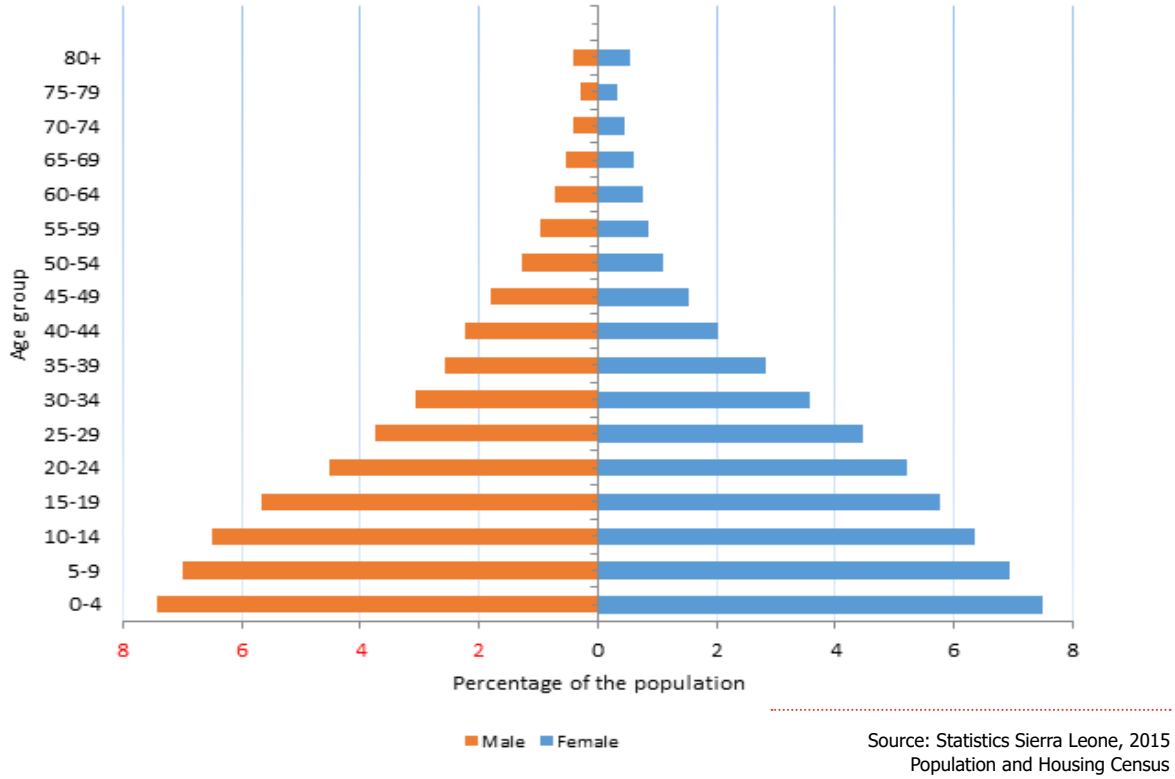
Table 2.15 Adjusted population and adjustment factors by age and sex (continued)

Age group	Adjusted population			Distribution			Adjustment factors		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
20–24	688,777	319,766	369,011	9.7	9.2	10.2	1.039	1.038	1.040
25–29	582,026	265,987	316,039	8.2	7.6	8.8	0.957	0.958	0.957
30–34	471,165	217,854	253,311	6.6	6.2	7.0	1.085	1.089	1.081
35–39	384,213	183,570	200,643	5.4	5.3	5.6	0.912	0.911	0.913
40–44	304,132	159,483	144,649	4.3	4.6	4.0	1.016	1.035	0.997
45–49	237,272	128,422	108,850	3.3	3.7	3.0	0.980	0.960	1.004
50–54	168,029	90,213	77,816	2.4	2.6	2.2	0.900	0.911	0.887
55–59	129,214	68,098	61,116	1.8	2.0	1.7	1.170	1.149	1.194
60–64	104,578	51,343	53,235	1.5	1.5	1.5	0.928	0.951	0.907
65–69	81,826	39,058	42,768	1.2	1.1	1.2	1.110	1.073	1.146
70–74	61,547	29,119	32,428	0.9	0.8	0.9	0.939	0.951	0.927
75–79	43,750	21,532	22,218	0.6	0.6	0.6	1.101	1.074	1.129
80+	67,503	29,768	37,735	1.0	0.9	1.0	1.000	1.000	1.000

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The population pyramid of the adjusted population is given in Figure 2.9. The pyramid bears the shape that is expected of a population with relatively high and declining fertility, thus suggesting that the adjusted age distribution is close to the true age–sex structure of Sierra Leone.

Figure 2.9 Population pyramid for the adjusted population



Source: Statistics Sierra Leone, 2015 Population and Housing Census

2.6.3 Adjusting of the age-sex distribution of the population of districts and regions

To maintain consistency between the national and sub-national projected population, the Arriaga method, which was used to adjust the national population, was also used to adjust the population of each district. The adjusted population of the regions was obtained by adding up the population of the constituent districts. The adjusted population of the regions and districts is shown in Appendix Table A2.2.

2.7 Summary, conclusions and recommendations

2.7.1 Summary

Census data on age and sex are very important in demographic analysis, as well as in socio-economic planning and service delivery. However, they are usually affected by reporting errors which arise out of age-selective under-enumeration, digit preference and age misstatement. Therefore, it is necessary to evaluate the data to establish the magnitude and direction of the error reporting of the age and sex data.

The sex ratio was the tool used to evaluate the quality of the sex data. The data showed that between 1963 and 1985, the overall sex ratios of the total population were close to 100 males per 100 females, which is in line with the expected pattern. However, the sex ratio for 2004 dropped to 94.2 while the one for 2015 was slightly higher at 96.9. The drop in the sex ratio in 2004 can be partly attributed to the 11-year Civil War.

In a normal population, the age specific sex ratios are expected to be close to 100 in the younger ages, and decline smoothly as age increases. However, 2015 age-specific sex ratios did not follow the expected pattern but were fluctuating, especially at the older ages. Specifically, the sex ratios for the ages 40 to 64 were more than 100 males per 100 females, a phenomenon which cannot be explained by the recent demographic patterns of the country.

Visual observation of the age data showed evidence of age heaping. This was confirmed by the Whipple's, Myer's and Bachi's Indices of digit preference, which showed high preference for ages ending in digits '0' and '5'. The population pyramid for the 2015 Census showed that the population aged 0–4 years is under-enumerated. The under-enumeration of infants (population aged '0' years) is estimated to be 32 per cent.

The United Nations AAI, which measures the quality of both age and sex data concurrently, gave an index of 54.9, and hence the 2015 census age-sex data were categorized as 'highly inaccurate'. The quality of the age-sex data was rated as 'highly inaccurate' for both rural and urban areas, although the quality in the rural areas was worse than that of urban areas.
The inferior quality of the age-sex data necessitated use of mathematical methods to adjust the data. Several methods were tested to adjust the data, but the Arriaga method was chosen for producing the final adjusted age-sex distribution. The method was chosen because it does not change the total population of each sex, thus maintaining consistency with the original census information, and makes an adjustment for under-enumeration of the population aged 0 to 4 years.

2.7.2 Conclusion

The quality of the overall sex data from the 2015 Census was acceptable, but the quality of the age data was grossly inaccurate. The quality of 2015 census age-sex data was close to that for the 1985 Census but worse than that for the 2004 Census.

2.7.3 Recommendations

The quality of the age data from the 2015 Census was highly inaccurate. Therefore, it was necessary to adjust the age-sex distribution to remove the age reporting errors. The adjusted age-sex distribution of the population should be used for purposes of making population projections and developing of plans.

In subsequent data collection exercises, extra efforts should be made to equip enumerators and interviewers with skills on how to collect excellent quality age and sex data. Some possible approaches include combining the question on age with that on 'exact date of birth' and encouraging enumerators to use written records, like immunization records, when estimating the age of persons who do not know their age.

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Appendix

Table A2.1: Technical note on discrepancy in some indicators

In the report, efforts have been made to compare indices from the 2015 Census with those from previous censuses, especially 2004 and 1985. To ensure consistency with the 2015 index, the same techniques that were used for the 2015 data were also applied to the numbers as given in the published reports. The results obtained in some cases were slightly different from those published before. Where such cases exist, both numbers are reproduced below:

Table A2.1 Technical note on discrepancy in some indicators

Census year	Index	Current value	Published value	Source of published value
2004	Whipple's Index (males)	227	230	2004 Population and Housing census – Analytical report on Population size, distribution and Age-sex structure
	Whipple's Index (Females)	258	254	
	Overall Myer's Index (Both sexes)	46.2	48.7	
	Overall Myer's Index (Males)	41.6	44.5	
	Overall Myer's Index (Females)	50.3	52.5	
1985	Age Accuracy index	44.9	42	1985 Population and Housing Census – Analytical Report
	Overall Myer's Index (Males)	49.1	47.0	
	Overall Myer's Index (Females)	53.7	52.1	

Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, 2004 Population and Housing census – Analytical report on Population size, distribution and Age-sex structure
National Statistics Office (Sierra Leone), 1985 Population and Housing Census – Analytical Report

Table A2.2 Adjusted population by age, region, district and sex

Age group	Eastern region			Kailahun		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages	1,642,370	814,441	827,929	526,379	260,586	265,793
0-4	239,493	117,406	122,087	75,746	36,872	38,874
5-9	233,842	117,097	116,745	76,281	38,563	37,718
10-14	224,393	114,098	110,295	75,061	39,017	36,044
15-19	195,953	97,649	98,304	65,066	33,285	31,781
20-24	150,665	68,557	82,108	47,341	22,111	25,230
25-29	125,536	55,870	69,666	38,765	17,365	21,400
30-34	107,886	49,080	58,806	33,700	14,714	18,986
35-39	89,625	42,894	46,731	27,966	12,699	15,267
40-44	71,732	39,200	32,532	22,299	11,796	10,503
45-49	55,583	31,900	23,683	17,193	9,564	7,629
50-54	37,220	21,527	15,693	11,285	6,268	5,017
55-59	28,310	16,223	12,087	8,659	4,732	3,927
60-64	23,991	12,751	11,240	7,737	3,889	3,848
65-69	18,964	9,848	9,116	6,226	3,073	3,153
70-74	14,243	7,386	6,857	4,707	2,353	2,354
75-79	9,830	5,368	4,462	3,181	1,731	1,450
80 +	15,104	7,587	7,517	5,166	2,554	2,612

Table A2.2 Adjusted population by age, region, district and sex (continued)

Age group	Kenema			Kono		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages	609,891	301,104	308,787	506,100	252,751	253,349
0-4	88,927	43,736	45,191	74,820	36,798	38,022
5-9	84,966	42,338	42,628	72,595	36,196	36,399
10-14	80,093	40,245	39,848	69,239	34,836	34,403
15-19	70,655	34,674	35,981	60,232	29,690	30,542
20-24	57,319	25,699	31,620	46,005	20,747	25,258
25-29	48,372	21,368	27,004	38,399	17,137	21,262
30-34	40,778	18,687	22,091	33,408	15,679	17,729
35-39	33,764	16,325	17,439	27,895	13,870	14,025
40-44	27,003	14,790	12,213	22,430	12,614	9,816
45-49	21,034	12,082	8,952	17,356	10,254	7,102
50-54	14,410	8,352	6,058	11,525	6,907	4,618
55-59	11,071	6,347	4,724	8,580	5,144	3,436
60-64	9,352	4,948	4,404	6,902	3,914	2,988
65-69	7,368	3,807	3,561	5,370	2,968	2,402
70-74	5,486	2,839	2,647	4,050	2,194	1,856
75-79	3,706	2,043	1,663	2,943	1,594	1,349
80 +	5,587	2,824	2,763	4,351	2,209	2,142

Table A2.2 Adjusted population by age, region, district and sex (continued)

Age group	Northern region			Bombali		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages	2,508,201	1,224,828	1,283,373	606,544	296,683	309,861
0-4	420,049	211,033	209,016	95,175	47,882	47,293
5-9	372,915	190,808	182,107	86,862	44,300	42,562
10-14	325,639	169,146	156,493	78,237	40,325	37,912
15-19	277,645	140,292	137,353	68,040	34,378	33,662
20-24	223,922	101,399	122,523	56,198	26,440	29,758
25-29	186,242	81,119	105,123	46,785	21,324	25,461
30-34	153,743	67,224	86,519	37,424	16,642	20,782
35-39	126,900	57,076	69,824	30,726	13,899	16,827
40-44	102,933	50,922	52,011	25,233	12,471	12,762
45-49	81,416	41,606	39,810	20,141	10,223	9,918
50-54	58,059	29,697	28,362	14,600	7,391	7,209
55-59	45,323	22,816	22,507	11,609	5,736	5,873
60-64	37,536	17,546	19,990	9,866	4,475	5,391
65-69	29,900	13,680	16,220	7,980	3,506	4,474
70-74	22,937	10,543	12,394	6,195	2,696	3,499
75-79	16,650	8,135	8,515	4,513	2,046	2,467
80 +	26,392	11,786	14,606	6,960	2,949	4,011

Table A2.2 Adjusted population by age, region, district and sex (continued)

Age group	Kambia			Koinadugu		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages	345,474	165,541	179,933	409,372	204,498	204,874
0-4	62,259	31,378	30,881	63,928	31,807	32,121
5-9	52,505	26,822	25,683	63,240	32,586	30,654
10-14	43,170	22,291	20,879	61,149	32,361	28,788
15-19	35,946	17,893	18,053	52,045	27,113	24,932
20-24	29,169	12,687	16,482	36,661	17,444	19,217
25-29	24,421	10,112	14,309	28,894	13,002	15,892
30-34	20,658	8,621	12,037	23,471	9,980	13,491
35-39	17,209	7,418	9,791	19,295	8,326	10,969
40-44	13,930	6,698	7,232	16,325	7,919	8,406
45-49	11,106	5,501	5,605	12,778	6,532	6,246
50-54	8,054	3,885	4,169	8,364	4,543	3,821
55-59	6,452	3,050	3,402	6,286	3,515	2,771
60-64	5,616	2,528	3,088	5,305	2,859	2,446
65-69	4,542	2,024	2,518	4,101	2,230	1,871
70-74	3,473	1,564	1,909	2,953	1,658	1,295
75-79	2,410	1,150	1,260	1,858	1,143	715
80 +	4,554	1,919	2,635	2,719	1,480	1,239

Table A2.2 Adjusted population by age, region, district and sex (continued)

Age group	Port Loko			Tonkolili		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages	615,376	294,954	320,422	531,435	263,152	268,283
0-4	103,824	52,188	51,636	94,863	47,778	47,085
5-9	89,335	45,423	43,912	80,973	41,677	39,296
10-14	75,410	38,624	36,786	67,673	35,545	32,128
15-19	64,302	31,652	32,650	57,312	29,256	28,056
20-24	53,831	23,076	30,755	48,063	21,752	26,311
25-29	45,950	19,034	26,916	40,192	17,647	22,545
30-34	39,478	17,085	22,393	32,712	14,896	17,816
35-39	32,985	14,855	18,130	26,685	12,578	14,107
40-44	26,279	13,015	13,264	21,166	10,819	10,347
45-49	20,888	10,635	10,253	16,503	8,715	7,788
50-54	15,371	7,657	7,714	11,670	6,221	5,449
55-59	12,090	5,854	6,236	8,886	4,661	4,225
60-64	9,779	4,346	5,433	6,970	3,338	3,632
65-69	7,843	3,411	4,432	5,434	2,509	2,925
70-74	6,168	2,729	3,439	4,148	1,896	2,252
75-79	4,756	2,299	2,457	3,113	1,497	1,616
80 +	7,087	3,071	4,016	5,072	2,367	2,705

Table A2.2 Adjusted population by age, region, district and sex (continued)

Age group	Southern			Bo		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages	1,441,308	702,151	739,157	575,478	280,569	294,909
0-4	229,598	114,434	115,164	87,106	43,292	43,814
5-9	208,054	105,144	102,910	80,701	40,278	40,423
10-14	185,781	94,842	90,939	73,868	36,911	36,957
15-19	159,835	79,466	80,369	64,900	31,781	33,119
20-24	128,223	57,656	70,567	53,998	24,820	29,178
25-29	107,749	47,030	60,719	45,483	20,527	24,956
30-34	91,666	40,606	51,060	37,331	16,859	20,472
35-39	76,297	35,149	41,148	30,704	14,405	16,299
40-44	61,312	31,575	29,737	24,585	12,960	11,625
45-49	48,441	25,906	22,535	19,410	10,621	8,789
50-54	34,556	18,469	16,087	14,014	7,596	6,418
55-59	27,079	14,136	12,943	10,945	5,790	5,155
60-64	22,641	10,725	11,916	8,941	4,340	4,601
65-69	18,192	8,321	9,871	7,126	3,308	3,818
70-74	14,117	6,410	7,707	5,514	2,477	3,037
75-79	10,417	4,993	5,424	4,107	1,848	2,259
80 +	17,350	7,289	10,061	6,745	2,756	3,989

Table A2.2 Adjusted population by age, region, district and sex (continued)

Age group	Bonthe			Moyamba		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages	200,781	99,014	101,767	318,588	153,699	164,889
0-4	33,175	16,677	16,498	55,729	28,184	27,545
5-9	29,331	14,970	14,361	46,096	23,693	22,403
10-14	25,515	13,176	12,339	37,033	19,309	17,724
15-19	21,831	10,947	10,884	30,806	15,451	15,355
20-24	17,816	7,963	9,853	25,469	11,026	14,443
25-29	15,005	6,543	8,462	22,008	9,149	12,859
30-34	12,700	5,796	6,904	19,774	8,525	11,249
35-39	10,526	5,003	5,523	17,119	7,682	9,437
40-44	8,390	4,347	4,043	14,431	7,127	7,304
45-49	6,587	3,547	3,040	11,820	6,005	5,815
50-54	4,636	2,567	2,069	8,813	4,454	4,359
55-59	3,655	1,982	1,673	7,098	3,483	3,615
60-64	3,191	1,528	1,663	5,938	2,625	3,313
65-69	2,563	1,189	1,374	4,851	2,080	2,771
70-74	1,939	910	1,029	3,862	1,668	2,194
75-79	1,317	690	627	2,969	1,388	1,581
80 +	2,604	1,179	1,425	4,772	1,850	2,922

Table A2.2 Adjusted population by age, region, district and sex (continued)

Age group	Pujehun			Western		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages	346,461	168,869	177,592	1,500,234	749,558	750,676
0-4	53,588	26,281	27,307	170,067	84,795	85,272
5-9	51,926	26,203	25,723	173,150	83,667	89,483
10-14	49,365	25,446	23,919	175,749	82,907	92,842
15-19	42,298	21,287	21,011	175,918	83,981	91,937
20-24	30,940	13,847	17,093	185,967	92,154	93,813
25-29	25,253	10,811	14,442	162,499	81,968	80,531
30-34	21,861	9,426	12,435	117,870	60,944	56,926
35-39	17,948	8,059	9,889	91,391	48,451	42,940
40-44	13,906	7,141	6,765	68,155	37,786	30,369
45-49	10,624	5,733	4,891	51,832	29,010	22,822
50-54	7,093	3,852	3,241	38,194	20,520	17,674
55-59	5,381	2,881	2,500	28,502	14,923	13,579
60-64	4,571	2,232	2,339	20,410	10,321	10,089
65-69	3,652	1,744	1,908	14,770	7,209	7,561
70-74	2,802	1,355	1,447	10,250	4,780	5,470
75-79	2,024	1,067	957	6,853	3,036	3,817
80 +	3,229	1,504	1,725	8,657	3,106	5,551

Table A2.2 Adjusted population by age, region, district and sex (continued)

Age group	Western Area Rural			Western Area Urban		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages	444,270	221,351	222,919	1,055,964	528,207	527,757
0-4	58,405	28,980	29,425	111,662	55,815	55,847
5-9	56,096	27,384	28,712	117,054	56,283	60,771
10-14	53,767	25,849	27,918	121,982	57,058	64,924
15-19	51,334	24,620	26,714	124,584	59,361	65,223
20-24	51,071	24,527	26,544	134,896	67,627	67,269
25-29	44,137	21,519	22,618	118,362	60,449	57,913
30-34	32,749	16,609	16,140	85,121	44,335	40,786
35-39	25,801	13,605	12,196	65,590	34,846	30,744
40-44	19,979	11,320	8,659	48,176	26,466	21,710
45-49	15,212	8,783	6,429	36,620	20,227	16,393
50-54	10,543	5,813	4,730	27,651	14,707	12,944
55-59	7,733	4,129	3,604	20,769	10,794	9,975
60-64	5,689	2,883	2,806	14,721	7,438	7,283
65-69	4,178	2,032	2,146	10,592	5,177	5,415
70-74	2,962	1,384	1,578	7,288	3,396	3,892
75-79	2,044	940	1,104	4,809	2,096	2,713
80 +	2,570	974	1,596	6,087	2,132	3,955

CHAPTER 3: POPULATION SIZE, COMPOSITION AND AGE-SEX DISTRIBUTION

3.1 Introduction

The size of a population is the basic demographic information that a government or any other planning or service delivery entity wants to obtain. A study of the distribution of population is important, because population is a critical factor in resource allocation and service delivery. Statistics on the distribution of the population among political or administrative areas are useful for administrative and planning purposes. Population size is used as a denominator in the computation of many service delivery indicators, to evaluate efficiency in service delivery.

Information on the distribution of the population by age and sex is of immense importance in making critical decisions in public administration, such as, apportionment of representation in legislative bodies, identification and registration of voters, provision of social services such as education, health services, food and shelter, and for making population forecasts.

Information on the distribution of the population by age and sex is also of foremost importance for the analysis of other types of data for socio-economic planning. Many planning and service delivery decisions require population data presented separately for males and females, and for specific ages or age groups. Knowledge about the age-sex distribution of a population by various characteristics helps planners and policy makers to better target sub-populations requiring services.

The study of population composition allows for inter-population comparison of the population among the different traits or attributes. The study traits are usually those that have meaningful relationships on the behaviour of the population of the community. However, some would be useful traits, such as social class or extended kinship relationships, but are usually excluded because of problems of getting accurate data. In this report, the study of population composition is limited to nationality, ethnicity, languages spoken and religion.

3.2 Sources of data and their limitations

Information about the population size was obtained from the count of all household and institutional population. The 2015 Census was a de facto census, that is, persons were enumerated in the households where they spent the census night, while persons who spent the census night in hotels, hospital patients, prisoners and the like were enumerated in their respective institutions. The 2015 Census collected information on the age of all persons in households and institutions by asking for 'age as at last birthday (completed years)'. In cases where the age was not known, special efforts were made to estimate the age by using the national events calendar and relating the person's age to an event in the calendar.

The census collected information on the sex of every household members and residents of institutions, by asking the question 'Is this person male or female?'. To avoid errors of misclassification, the enumerators were trained to 'not guess from the name and relationship, which sex the person is and to be careful in dealing with names that are shared by both sexes'.

The previous censuses of 1963, 1974, 1985 and 2004 were also de facto in nature, just like the 2015 Census and hence the population counts from the five modern censuses of Sierra Leone are comparable.

The data have some limitations. Chapter Two of this report showed that the quality of the age-sex data was classified as 'highly inaccurate' according to the United Nations age-sex accuracy index, and recommended the use of the adjusted age-sex compositions. Further, the census was de facto in nature and therefore the data reflect the situation as it was on the census night, and not necessarily what usually occurs in the area. In a case where the two are significantly different, the interpretation of the information may be misleading.

3.3 Population size and distribution

The 2015 Census recorded a total population of 7,092,113 persons, of whom 7,076,119 (99.8 perc ent) were enumerated in private households and the remaining 15,994 persons (0.2 per cent) were enumerated in institutions.

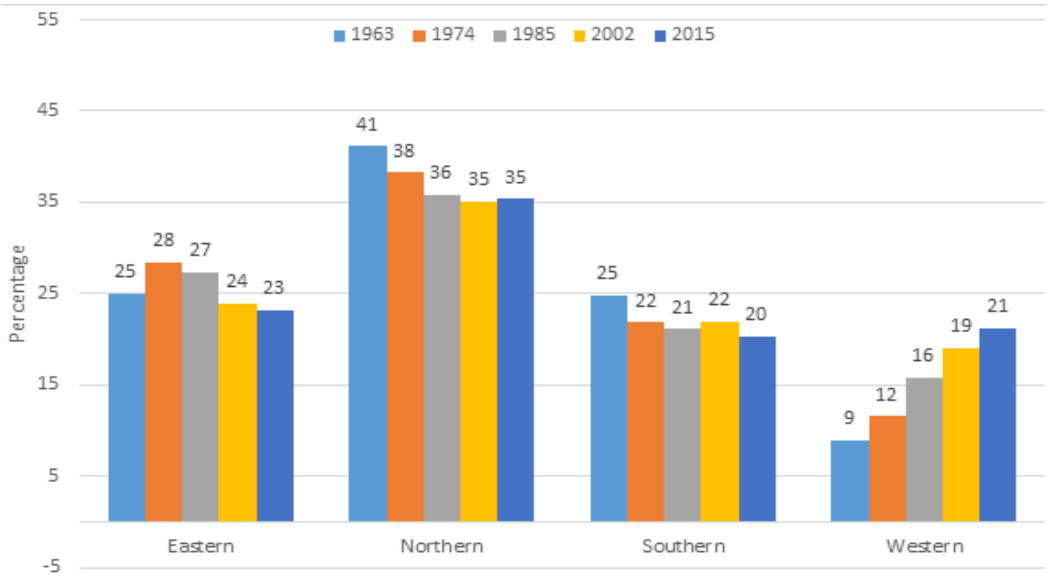
The distribution of the country's population among the different administrative or geographical units is affected by physical factors as well as social, political and historical factors, both past and present. The 1985 Population Census Analytical Report noted that 'the distribution of the population in 1985, appears to be associated with the nation's capital, Freetown, which is the most important centre of industrialization, modernization and in-migration in Sierra Leone'.

3.3.1 Population of the regions

The census found that the distribution of the population among regions in 2015 was even (Figure 3.1). The contribution of the regions to the total population varied between 21 per cent for the Western Region and 35 per cent for the Northern Region.

The overall pattern of distribution of the population among regions has remained similar in the three most recent censuses. The Northern Region has more than one third of the country's population, followed by the Eastern Region with the next largest share. However, its share declined from 27 per cent in 1985 to 23 per cent in 2015. In 2015, the Western Region, which had previously been the least populated up to the 2004 Census, marginally overtook the Southern Region.

Figure 3.1 Percentage distribution of the census population by region, 1963-2015



Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone. 2008. Annual Statistical Digest 2005/2006
and Housing Census – Analytical Report

3.3.2 Population of the districts

The Western Area Urban district (Freetown City) was the most populous district in the country in 2015, with a population of 1.1 million persons, contributing 14.9 per cent of the total population (Table 3.1). Bonthe district was the least populous, with only 200,781 persons. Eight out of the 14 districts had a population of 500,000 persons or more, and these collectively contributed 70.9 per cent of the total population.

Table 3.1 Distribution of population size by district

Population size	District	Number of districts	Population	Share of the population
Total country		14	7,092,113	100.0
1,000,000 or more	Western Area Urban	1	1,055,964	14.9
700,000 – 999,999		0	0	0.0
600,000 – 699,999	Port Loko, Kenema, Bombali	3	1,831,811	25.8
500,000 – 599,999	Bo, Tonkolili, Kailahun, Kono	4	2,139,392	30.2
400,000 – 499,999	Western Area Rural, Koinadugu	2	853,642	12.0
300,000 – 399,999	Pjehun, Kambia, Moyamba	3	1,010,523	14.2
Less than 300,000	Bonthe	1	200,781	2.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

3.3.3 Changes in distribution of the population by region and district

The Western Region's share of the population has steadily increased from 8.9 per cent in 1963 to 21.2 per cent in 2015, while that for the Northern Region has declined from 35.8 per cent in 1985 to 35.4 per cent in 2015 (Table 3.2). The Eastern and Southern regions did not show any systematic pattern of change in their shares over the five censuses.

The share of the Western Area Urban district (Freetown City) increased up to 15.5 per cent in 2004 before declining back down to 14.9 per cent of the total population in 2015, while the Western Area Rural district increased throughout the five censuses. On the other hand, Bonthe district experienced a decline in its share of the national population throughout all the censuses. The rest of the districts did not show a consistent pattern.

Table 3.2 Population and percentage share of population by district, 1963 – 2015

Region/district	Population in 2015	Share of the total population				
		1963	1974	1985	2004	2015
Total country	7,092,113	100.0	100.0	100.0	100.0	100.0
Eastern	1,642,370	25.0	28.4	27.3	23.9	23.2
Kailahun	526,379	6.9	6.6	6.7	7.2	7.4
Kenema	609,891	10.4	9.7	9.6	10.0	8.6
Kono	506,100	7.7	12.0	11.1	6.7	7.1
Northern	2,508,201	41.2	38.2	35.8	35.1	35.4
Bombali	606,544	9.1	8.5	9.0	8.2	8.6
Kambia	345,474	6.3	5.7	5.3	5.4	4.9
Koinadugu	409,372	5.9	5.8	5.2	5.3	5.8
Port Loko	615,376	11.3	10.7	9.4	9.1	8.7
Tonkolili	531,435	8.5	7.5	6.9	7.0	7.5
Southern	1,441,308	24.9	21.8	21.1	22.0	20.3
Bo	575,478	9.6	8.0	7.6	9.3	8.1
Bonthe	200,781	3.7	3.2	3.0	2.8	2.8
Moyamba	318,588	7.7	6.9	7.1	5.2	4.5
Pujehun	346,461	3.9	3.8	3.3	4.6	4.9
Western	1,500,234	8.9	11.6	15.8	19.0	21.2
Western Area Rural	444,270	3.1	1.5	2.4	3.5	6.3
Western Area Urban	1,055,964	5.9	10.1	13.4	15.5	14.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, 2004 Population and Housing Census Report

3.3.4 Population of the chiefdoms

At the time of the 2015 Census, Sierra Leone was divided into 166 chiefdoms. The number of chiefdoms per district varied between 4 for Western Area Rural district and 17 for Kenema district. Table 3.3 shows that the population of the chiefdoms was quite varied. There were 11 chiefdoms with a population of more than 100,000 persons each, collectively constituting 27.8 per cent of the population. The 13 chiefdoms with less than 10,000 persons each constituted 1.3 per cent. Thirty-five of the chiefdoms had a population of between 30,000 and 40,000 persons, with 17.1 per cent of the population. The population of the individual chiefdoms ranged from 3,584 for Langrama chiefdom in Keneman district to 447,840 persons for East 3 chiefdom in Western Area Urban district (see Appendix Table A3.3).

Table 3.3 Distribution of population size by chiefdom, Sierra Leone 2015

Population size	Number of chiefdoms	Population	Share of the population
All sizes	166	7,092,113	100.0
More than 100,000	11	1,972,469	27.8
50,000 - 100,000	28	1,919,455	27.1
40,000 - 50,000	14	629,021	8.9
30,000 - 40,000	35	1,209,696	17.1
20,000 -30,000	32	792,135	11.2
10,000 - 20,000	33	475,306	6.7
Less than 10,000	13	94,031	1.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 3.4 shows that the chiefdoms of the Western Region were highly populous with 12 out the 14 chiefdoms each having 50,000 persons or more. Conversely, the Western Region had 25 out of its 54 chiefdoms having less than 25,000 persons each and another 25 chiefdoms had between 20,000 and 50,000 persons. The Northern Region had 33 of its 54 chiefdoms having between 20,000 and 50,000 persons.

The share of the chiefdom population to the population of the district was quite varied. Waterloo chiefdom contributed 48.2 per cent of the population of Western Area Rural district, closely followed by East 3 chiefdom which contributed 42.5 per cent of population of Western Area Urban district. The rest of the chiefdoms contributed less than one third of their respective district populations. The smallest contributors were Langarama and Nomo chiefdoms which contributed 0.6 and 0.9 per cent respectively of the Kenema district population (see Appendix Table A3.3).

Table 3.4 Number of chiefdoms by region, district and population size

Region/district	Number of chiefdoms	Population size		
		Less than 20,000	20,000 - 50,000	More than 50,000
Total country	166	46	81	39
Eastern	46	16	21	9
Kailahun	14	1	9	4
Kenema	17	7	8	2
Kono	15	8	4	3

Table 3.4 Number of chiefdoms by region, district and population size (continued)

Region/district	Number of chiefdoms	Population size		
		Less than 20,000	20,000 - 50,000	More than 50,000
Northern	54	5	33	16
Bombali	14	3	8	3
Kambia	7	0	4	3
Koinadugu	11	0	10	1
Port Loko	11	1	5	5
Tonkolili	11	1	6	4
Southern	54	25	25	4
Bo	16	6	7	3
Bonthe	12	7	5	0
Moyamba	14	6	8	0
Pujehun	12	6	5	1
Western	12	0	2	10
Western Area Rural	4	0	1	3
Western Area Urban	8	0	1	7

Source: Statistics Sierra Leone, 2015 Population and Housing Census

3.4 Population growth

An increase or reduction in the size and composition of the population is brought about by an interaction of three demographic factors namely, fertility, mortality and migration into or out of a given area. Internal migration especially rural-urban migration plays a significant role in the growth of sub-nation population.

3.4.1 Growth of the total population (1963-2015)

The population of Sierra Leone increased from 2,180,355 in 1963 to 2,735,159 in 1974 and 3,515,812 in 1985. Between 2004 and 2015, the population increased by about 2.1 million persons from 4,976,871 to 7,092,113, representing an inter-censal percentage increase of 42.5 per cent.

The average annual growth rate is a more conventional measure of population change, which allows for comparison across space or time, irrespective of the size of the population. For purposes of this report, the exponential growth rate formula is used. From Table 3.5, it is seen that since 1963, the annual growth rates have been increasing except for the period 1985 to 2004.

The relatively low growth rate between 1985 and 2004 (1.8 per cent) could be attributed to the 11-year Civil War. The average annual growth rate for the most recent inter-censal period (2004 to 2015) was 3.2 per cent. The growth rate for the period 2004-2015 was much higher than the 2.6 per cent estimated for the African continent in 2015 (United Nations Economic Commission for Africa, 2016).

The 1985 census report showed that the under-coverage of the census enumeration decreased from 9 per cent in the 1963 and 1974 Censuses to 5 per cent in the 1985 Census. This improvement in the enumeration coverage could, in part, explain the continuous increase in the population growth rates.
If the current growth rate continues unchecked, the population of Sierra Leone would double in the next 21.6 years. This high growth rate, coupled with an expansion of the population of reproductive age, would put a heavy burden on the service delivery.

Table 3.5 Population size and inter-censal population growth rates, 1963-2015

Census year	Population size	Inter-censal period	Percentage change	Average annual growth rate	Doubling time (years)
1963	2,180,355				
		1963 – 1974	25.4	2.0	34.5
1974	2,735,159				
		1974 – 1985	61.2	2.3	30.0
1985	3,515,812				
		1985 – 2004	128.3	1.8	38.3
2004	4,976,871				
		2004 - 2015	225.3	3.2	21.6
2015	7,092,113				

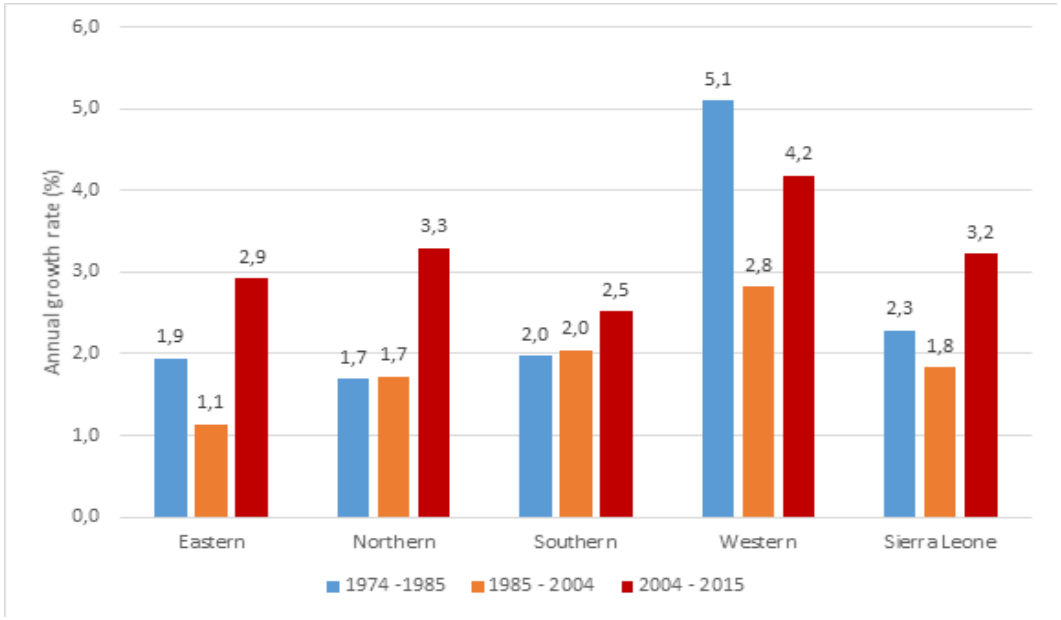
Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, 2004 Population and Housing Census Report

3.4.2 Growth of the sub-national population (1974-2015)

Between 1974 and 2015, all regions experienced an increase in their population and had positive growth rates. Figure 3.2 shows that during the period 2004 to 2015, the Western Region experienced the highest growth rate of 4.2 per cent while the Southern Region had the lowest growth rate of 2.5 per cent. The Western Region had the highest growth rates for the three most recent inter-censal periods.

The growth rates for the Northern and Southern regions increased throughout the period 1974 to 2015, with the growth being faster between 1985 and 2004. Conversely, the Eastern and Western regions had a sharp decline in the growth rates during the period 1985–2004, followed by a sharp increase during the period 2004-2015. The growth rates for all the regions for the period 2004–2015 were higher than those for the period 1985–2004.

Figure 3.2 Inter-censal population growth rates by region, 1974-2015



Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, 2004 Population and Housing Census Report

Table 3.6 gives the annual growth rates for the districts for the four inter-censal periods. The table shows that between 2004 and 2015, Western Area Rural district showed a very high growth rate of 8.5 per cent, while Moyamba district had the lowest growth rate of 1.8 per cent. During the same period one district had a growth rate higher than 4 per cent, seven districts had a growth rates between 3 per cent and 4 per cent, while another six districts had growth rates less than 3 per cent.

Between 1985 and 2004, Western Area Rural district exhibited the highest growth rate (3.8 per cent), while Kono district experienced a negative growth rate (-0.8 per cent). The district specific growth rates were generally higher for the period 2004-2015 compared to 1985–2004, except for Bo and Kenema districts.

Table 3.6 Population growth rate by region and district, 1963–2015

Region/ district	Average annual growth rate				Percentage change in population		
	1963 - 1974	1974 - 1985	1985 - 2004	2004 - 2015	Doubling time	1985 – 2004	2004 - 2015
Sierra Leone	2.1	2.3	1.8	3.2	21.4	41.6	42.5
Eastern	3.2	1.9	1.1	2.9	23.7	24.0	37.8
Kailahun	1.7	2.4	2.2	3.5	19.7	53.2	47.0
Kenema	1.4	2.1	2.1	1.8	37.4	47.7	22.5
Kono	6.1	1.5	-0.8	3.7	18.4	-13.9	50.9
Northern	1.4	1.7	1.7	3.3	20.9	38.6	43.7
Bombali	1.5	2.8	1.3	3.6	19.2	28.5	48.5
Kambia	1.1	1.6	2.0	2.2	31.0	45.2	27.7
Koinadugu	1.9	1.3	2.0	3.9	17.6	45.0	54.0
Port Loko	1.5	1.1	1.7	2.8	24.9	37.8	35.6
Tonkolili	1.0	1.5	1.9	3.9	17.8	42.8	53.1
Southern	0.9	2.0	2.0	2.5	27.4	47.4	31.9
Bo	0.3	1.9	2.9	2.0	35.1	72.6	24.1
Bonthe	0.8	1.7	1.5	3.3	20.9	32.9	43.7
Moyamba	1.1	2.6	0.2	1.8	38.0	4.1	22.1
Pujehun	1.7	1.2	3.5	3.8	18.2	94.9	51.7
Western	4.4	5.1	2.8	4.2	16.5	70.9	58.4
Western Area Rural	-4.7	6.8	3.8	8.5	8.1	106.3	155.0
Western Area Urban	7.0	4.8	2.6	2.8	24.3	64.5	36.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, 2004 Population and Housing Census Report

Table 3.7 shows that most of the chiefdoms (87 out of 166) experienced a growth rate between 2004 and 2015. However, a substantial number (79 out of 166) experienced a negative growth rate. This is not surprising given that chiefdoms are small administrative units with small populations and hence their population growth rates are sensitive to changes brought about by internal migration. This is even more pronounced given that the 2004 Census took place soon after the Civil War when some persons were possibly still displaced from their homes.

Table 3.7 Number of chiefdoms by region, district and annual growth rate, 2004-2015

Region/district	Annual growth rate (%)		
	Less than 0%	0 - 3.2%	More than 3.2%
Total country	79	75	12
Eastern	11	25	10
Kailahun	3	10	1
Kenema	6	4	7
Kono	2	11	2
Northern	27	27	0
Bombali	6	8	0
Kambia	5	2	0
Koinadugu	4	7	0
Port Loko	7	4	0
Tonkolili	5	6	0
Southern	34	18	2
Bo	10	5	1
Bonthe	6	6	0
Moyamba	11	2	1
Pujehun	7	5	0
Western	7	5	0
Western Area Rural	0	4	0
Western Area Urban	7	1	0

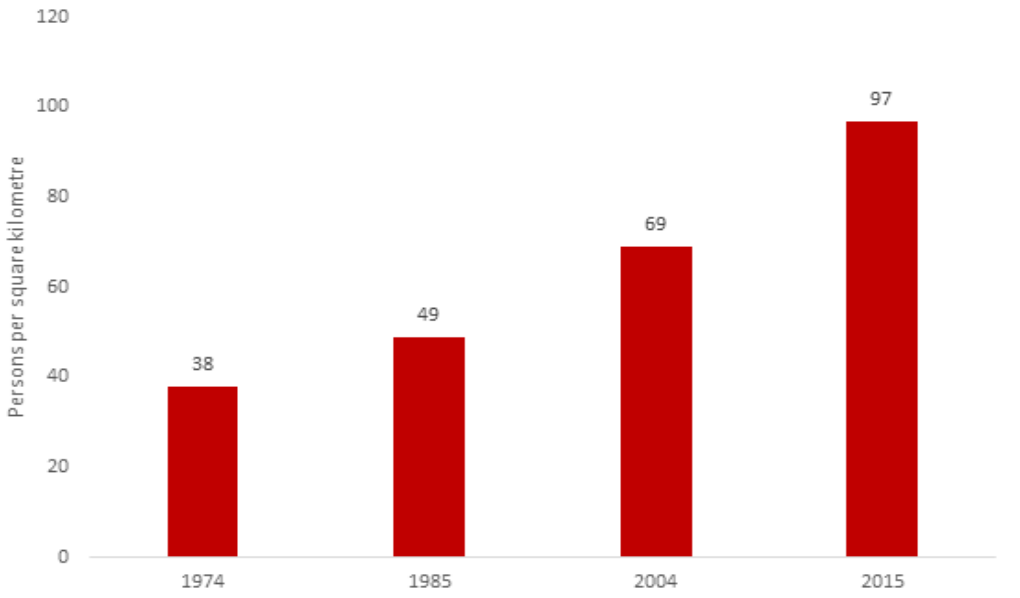
Source: Statistics Sierra Leone, 2015 Population and Housing Census

3.5 Area and population density

Population density is used in illustrating the relationship between the population and natural resources. In this case, it is computed as number of persons per square kilometre of land area.

Sierra Leone has a total land area of 72,929 square kilometres. The population density of Sierra Leone increased from 38 persons per square kilometre in 1974 to 97 persons per square kilometre in 2015, as shown in Figure 3.3. The population density of Sierra Leone in 2015 was much higher than for neighbouring countries Liberia (40.4) and Guinea (51.1), as well as for the continent as a whole (39.1).

Figure 3.3 Population density (persons per square kilometre), 1974-2015



Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, 2008, Annual Statistical Digest 2005/2006

Table 3.8 shows that nearly half of the land area (49.6 per cent) was in the Northern Region, while the Western Region had only 1.0 per cent. The Southern and Eastern regions collectively constituted half of the land area of the country. Koinadugu and Bombali districts were the largest districts with 17.1 and 11.4 per cent of the land area. The rest of the districts had less than 10 per cent of the land area, the smallest being Western Area Urban district with 0.1 per cent of the country's land area.

The population density in 2015 varied widely between regions and districts. The population density for the regions varied between 69 for the Northern Region and 2,156 for the Western Region. The population densities for the Southern and Eastern regions were 71 and 104 persons per square kilometre.

The districts in the Western Region had very high population densities of 12,878 for Western Area Urban and 724 for Western Area Rural. However, the population density was much lower for the other districts, ranging between 33 for Koinadugu district and 133 for Kailahun district. Six out of the 14 districts had population densities higher than the national average (97.2 persons per square kilometre).

Table 3.8 Population density by region and district

Region/district	Land area (sq.kms.) Share of land area	Share of land area	Share of the population	Population density
Total country	72,929	100.0	100.0	97
Eastern	15,740	21.6	23.2	104
Kailahun	3,959	5.4	7.4	133
Kenema	6,368	8.7	8.6	96
Kono	5,413	7.4	7.1	93
Northern	36,208	49.6	35.4	69
Bombali	8,289	11.4	8.6	73
Kambia	3,032	4.2	4.9	114
Koinadugu	12,443	17.1	5.8	33
Port Loko	5,978	8.2	8.7	103
Tonkolili	6,466	8.9	7.5	83
Southern	20,287	27.8	20.3	71
Bo	5,488	7.5	8.1	105
Bonthe	3,613	5.0	2.8	56
Moyamba	6,987	9.6	4.5	46
Pujehun	4,199	5.8	4.9	83
Western	696	1.0	21.2	2,156
Western Area Rural	614	0.8	6.3	724
Western Area Urban	82	0.1	14.9	12,878

Source: Statistics Sierra Leone, 2015 Population and Housing Census

3.6 Age and sex composition

The current age and sex composition of the population is determined by its past fertility, mortality and migration patterns. Most demographic and socio-economic analysis use population grouped in 5-year age groups, and hence these are used in the study of the age composition of the population. This is in line with the United Nations Principles and Recommendations for Population and Housing Censuses, which recommends tabulating the total population by single ages and in five-year age groups for the country and major administrative divisions.

3.6.1 Distribution of total population by age

Table 3.9 presents the age distribution of the 2015 Sierra Leone census population by age group, place of residence and sex. It was observed in Chapter 2 that the population of the age group 0–4 years is smaller than that of the age group 5–9 years. This is contrary to the expected pattern given the recent demographic trends in the country, and therefore points to under enumeration or age shifting. The female population had another 'trough' for the age group 10–14 years while the one for males appears for the age group 30–34 years. Thereafter the population of either sex follows the expected pattern.

The median age is the age that divides the age distribution of the population into two groups of equal-size. The median age for the total population in 2015 was 18.7 years, and was slightly higher for females (19.1 years) compared to males (18.4 years). Similarly, the median age for the urban population (20.1 years) was higher than that for the rural population (17.6 years). The higher median age for the urban population is partly due to rural-urban migration of population in the middle ages. The rural-urban difference in the median age is higher among males (3.9 years) than females (1.3 years). This is partly because there are more male than female migrants.

Table 3.9 Percentage distribution of the total population by place of residence, age and sex

Age	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0–4	13.2	13.4	13.0	14.5	14.9	14.2	11.3	11.4	11.3
5–9	15.6	15.9	15.4	17.5	18.2	16.8			
10–14	11.9	12.4	11.5	11.9	12.9	10.9	12.0	11.6	12.4
15–19	12.3	12.3	12.3	11.6	11.8	11.4	13.4	13.1	13.6
20–24	9.3	8.8	9.8	7.9	7.1	8.6	11.5	11.2	11.7
25–29	8.6	8.0	9.2	7.7	6.6	8.7	9.9	9.8	9.9
30–34	6.1	5.7	6.5	5.8	5.0	6.5	6.6	6.8	6.5
35–39	5.9	5.8	6.1	5.8	5.4	6.1	6.2	6.3	6.1
40–44	4.2	4.4	4.0	4.2	4.2	4.2	4.3	4.7	3.8
45–49	3.4	3.8	3.0	3.4	3.8	3.0	3.4	3.8	3.0
50–54	2.6	2.8	2.4	2.6	2.8	2.5	2.6	2.8	2.4
55–59	1.6	1.7	1.4	1.5	1.7	1.4	1.6	1.7	1.4
60–64	1.6	1.5	1.6	1.7	1.6	1.8	1.4	1.4	1.4
65–69	1.0	1.0	1.0	1.1	1.1	1.1	1.0	1.0	1.0
70–74	0.9	0.9	1.0	1.0	1.0	1.1	0.7	0.7	0.8

Table 3.9 Percentage distribution of the total population by place of residence, age and sex (continued)

Age	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
75–79	0.6	0.6	0.5	0.6	0.7	0.6	0.5	0.4	0.5
80–84	0.4	0.4	0.5	0.5	0.5	0.6	0.3	0.2	0.4
85–89	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.1	0.2
90–94	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1
95–99	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
100 +	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1
Median age	18.7	18.4	19.1	17.6	16.7	18.5	20.1	20.6	19.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

3.6.2 Population of broad age groups

Socio-economic planning usually requires data for some special categories of population, for example: children aged under 5 years; women of reproductive age (15-49 years): the working age (15 - 64 years) population; and the population out of the labour force, that is persons aged 65 years and over.

The relative sizes of these broad age groups for Sierra Leone are shown in Table 3.10. The table depicts a generally young population age structure, with 40.8 per cent of the population aged below 15 years, 3.5 per cent aged 65 years and above, while the working-age population (15–64 years) constituted 55.7 per cent. This is quite like the age distribution for Africa in 2015, whose respective shares were 40.7, 55.8 and 3.5 per cent.

The table also reveals some minor differences in the age structure of the male and female populations. The males had a slightly higher proportion of children less than 15 years (41.7 per cent) compared to females (39.9 per cent), while the females had higher proportions of older ages, probably due to higher male mortality. The women of reproductive age (15-49 years) constituted 50.9 per cent of the female population in 2015. This, coupled with a high fertility rate, will inevitably result in further population growth.

Comparing the age distributions for 2015 with those from the previous censuses, it can be seen that the share of the working age-group (15-64 years) is increasing, especially amongst the age group 15-24 years. This has resulted in a decline of the median age from 20.4 years in 1974 to 18.7 years in 2015. If this increase in the share of the working age population is sustained, then Sierra Leone is likely to benefit from the demographic dividend.

Table 3.10 Percentage distribution of the total population by age and sex, 1974 – 2015

Year/sex	0–4	0–14	15–24	25–49	50–64	65 +	All ages	Median age
1974								
Total	16.1	40.6	16.2	30.1	7.7	5.3	100.0	20.4
Male	16.0	41.4	14.9	29.7	8.4	5.6	100.0	20.4
Female	16.2	39.8	17.5	30.5	7.1	5.1	100.0	20.5
1985								
Total	16.5	41.5	17.6	27.9	7.3	5.8	100.0	19.4
Male	16.8	42.8	16.3	26.9	7.8	6.2	100.0	18.9
Female	16.1	40.2	18.8	28.9	6.9	5.3	100.0	19.8
2004								
Total	15.3	41.7	19.3	28.6	6.1	4.4	100.0	18.8
Male	15.6	43.1	18.8	27.6	6.1	4.3	100.0	18.2
Female	14.9	40.4	19.7	29.5	6.0	4.4	100.0	19.4
2015								
Total	13.2	40.8	21.7	28.3	5.8	3.5	100.0	18.7
Male	13.4	41.7	21.2	27.7	6.1	3.3	100.0	18.4
Female	13.0	39.9	22.1	28.8	5.5	3.6	100.0	19.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, Annual Statistical Digest 2005/06

3.6.3 Age composition of the population of the regions

Table 3.11 presents selected summary measures of the age distribution of the population of the regions. The age distribution for the Eastern, Northern and Southern regions have remained similar over the past four censuses. However, the age distribution for the Western Region has changed over time, the biggest change coming between 2004 and 2015.

The share of children aged 14 years and under has been decreasing but that of the adolescents (15-24) has been increasing since 1985 for the Eastern, Southern and Western regions, while the Northern Region showed no clear pattern. The share of the population aged 50 years and above was less than 20 per cent for all the regions and for all censuses.

In 2015, the Western Region had a median age of 21.5 years, which was higher compared to the other three regions. The median ages for the other regions fell between 18 and 18.3 years - very close to the national average of 18.7 years.

Table 3.11 Percentage distribution of the total population by age and region, 1974 - 2015

Region/year	Broad age groups (years)						
	0-14	15-24	25-49	50-64	65+	All ages	Median age
Eastern							
1974	40.6	21.3	25.0	8.7	4.3	100.0	21.7
1985	43.8	20.2	22.1	10.1	3.8	100.0	20.0
2004	42.2	20.7	23.6	9.4	4.0	100.0	19.4
2015	41.3	21.9	24.3	9.1	3.4	100.0	18.3
Northern							
1974	40.0	22.0	25.1	8.6	4.3	100.0	18.1
1985	41.8	21.1	23.0	10.4	3.7	100.0	18.2
2004	40.9	21.5	24.1	9.5	4.0	100.0	17.7
2015	43.8	20.3	23.2	9.1	3.7	100.0	17.6
Southern							
1974	41.2	21.4	24.8	8.4	4.2	100.0	24.2
1985	44.3	19.8	22.2	9.9	3.8	100.0	21.1
2004	42.7	20.6	23.5	9.1	4.0	100.0	18.7
2015	42.2	20.7	23.6	9.4	4.0	100.0	18.2
Western							
1974	40.2	18.5	25.3	10.5	5.5	100.0	19.8
1985	46.0	16.9	21.6	11.1	4.5	100.0	19.1
2004	43.0	17.7	23.5	10.8	5.0	100.0	20.4
2015	34.0	24.6	29.4	9.3	2.7	100.0	21.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, Annual Statistical Digest 2005/06

3.6.4 Age distribution of the population of the districts

All the districts of the Eastern, Northern and Southern regions had more than 40 per cent of their population aged less than 15 years. The districts of the Western Region had the lowest share of the population aged 65 years and above. The Western Area Urban district had the highest median age of 22.0 years, while Western Area Rural district had a median age of 20.2 years (Table 3.12). The rest of the districts had median ages between 16 and 19 years.

Koinadigu district stands out with the youngest age distribution with a median age of 16.8 years, the highest proportion of children less than 15 years (45.1 per cent) and the second lowest proportion of population aged 65 years and over (2.7 per cent).

Table 3.12 Percentage distribution of the total population by age, median age, dependency ratio, region and district

Region/district	Age groups (years)						
	0-14	15-24	25-49	50-64	65+	Total	Median age
Total country	40.8	21.7	24.9	9.2	3.5	100.0	18.7
Eastern	41.3	21.9	24.3	9.1	3.4	100.0	18.3
Kailahun	41.6	22.5	23.5	8.9	3.5	100.0	18.0
Kenema	40.3	22.1	24.8	9.4	3.5	100.0	18.8
Kono	42.1	21.1	24.6	9.0	3.3	100.0	18.1
Northern	43.8	20.3	23.2	9.1	3.7	100.0	17.6
Bombali	42.2	20.8	23.4	9.5	4.1	100.0	18.3
Kambia	44.7	19.4	22.6	9.2	4.1	100.0	17.3
Koinadugu	45.1	22.4	21.8	8.2	2.7	100.0	16.8
Port Loko	43.2	18.9	24.2	9.6	4.0	100.0	18.1
Tonkolili	44.8	20.1	23.3	8.6	3.2	100.0	17.2
Southern	42.2	20.7	23.6	9.4	4.0	100.0	18.2
Bo	40.9	21.5	24.1	9.5	4.0	100.0	18.7
Bonthe	42.7	20.6	23.5	9.1	4.0	100.0	18.0
Moyamba	43.0	17.7	23.5	10.8	5.0	100.0	18.4
Pujehun	43.2	22.3	23.1	8.2	3.2	100.0	17.5
Western	34.0	24.6	29.4	9.3	2.7	100.0	21.5
Western Area Rural	37.3	23.5	27.7	8.9	2.6	100.0	20.2
Western Area Urban	32.6	25.1	30.1	9.5	2.7	100.0	22.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

3.6.5 Age dependency ratios

The age dependency ratio jointly considers variations in the proportions of children, older persons, and persons of 'working age'. The dependent population are the children aged 0-14 years and older persons aged 65 years and over, while the working age population is aged 15-64 years.

The dependency ratio relates the sum of population in ages 0-14 years and 65 years and over to the population aged 15-64 years, multiplied by a constant, usually 100. Separate calculations can be made of the child dependency ratio or the old age dependency ratio by restricting the numerator only to ages under 15 years, or to 65 years and over.

Table 3.13 shows that the overall age dependency ratio from the 2015 Census was 79.5, implying that there were approximately four dependents for every five persons of working age. The trend over the past four censuses shows that between 1974 and 1985, the dependency ratio increased from 78.1 to 89.4 and then declined steadily to 79.5 per cent in 2015. This same pattern is observed for both child and old person dependency ratios.

The children aged less than 15 years of age constituted the bulk of the dependent population. The contribution of children to the dependency burden was very high in 1974 (96.4 per cent) but dropped drastically to 87.8 per cent in 1985. It has since been increasing to 90.6 in 2004 and 92.2 in 2015. The enormous difference between the 1974 Census and the subsequent ones is likely to be due to poorer quality age data from the 1974 Census.

Table 3.13 Age dependency ratio, 1974-2015

Census year	Age dependency ratio			
	Overall	Child	Older persons	Contribution of children
1974	78.1	75.3	2.8	96.4
1985	89.4	78.5	10.9	87.8
2004	85.4	77.3	8.1	90.6
2015	79.5	73.3	6.2	92.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, Annual Statistical Digest 2005/06

The dependency ratios for the regions and districts for the 1985 and 2005 censuses are presented in Table 3.14. In 2015, the dependency ratio was highest in Northern Region (90.4 per cent) and lowest for the Western Region (57.9 per cent). The dependency ratios for the Southern Region (85.9) and the Eastern Region (80.8) are closer to that for the Northern Region. Among the districts, the dependency ratio was highest for Kambia district (95.3 per cent) and lowest for the districts of the Western Region. Western Area Urban district had a dependency ratio of 54.6 per cent while that of the Western Area Rural district was 66.4 per cent.

Table 3.14 Dependency ratio by region, district and age

Region/ district	1985			2015		
	Total	Child	Old age	Total	Child	Old age
All ages	89.4	78.5	10.9	79.5	73.3	6.2
Eastern	***	***	***	80.8	74.6	6.2
Kailahun	94.5	80.4	14.1	82.2	75.9	6.3
Kenema	82.6	71.8	10.8	77.8	71.6	6.2
Kono	77.4	71.2	6.2	82.9	76.9	6.0

Table 3.14 Dependency ratio by region, district and age (continued)

Region/ district	1985			2015		
	Total	Child	Old age	Total	Child	Old age
Northern	***	***	***	90.4	83.4	7.0
Bombali	105.3	93.4	11.9	86.3	78.6	7.7
Kambia	103.8	91.5	12.3	95.3	87.2	8.1
Koinadugu	89.6	80.9	8.7	91.3	86.2	5.1
Port Loko	99.7	87.5	12.2	89.7	82.0	7.7
Tonkolili	93.8	82.5	11.3	92.4	86.2	6.2
Southern	***	***	***	85.9	78.4	7.5
Bo	87.3	73.4	13.9	81.5	74.3	7.3
Bonthe	90.1	74.6	15.5	87.8	80.2	7.5
Moyamba	92.7	77.0	15.7	92.4	82.7	9.7
Pujehun	89.4	73.2	16.2	86.6	80.6	6.0
Western	77.9	72.2	5.7	57.9	53.7	4.2
Western Area Rural	***	***	***	66.4	62.0	4.4
Western Area Urban	***	***	***	54.6	50.4	4.2

*** Data not available

Source: Statistics Sierra Leone, 2015 Population and Housing Census
National Statistics Office (Sierra Leone), 1985 Population Census – Analytical Report

3.6.6 Sex composition

Sex composition refers to the distribution of the population by sex and is undoubtedly one of the most important demographic characteristics. It directly affects the incidence of birth, marriage and is highly correlated with death rates. It is also used as a basis for disaggregation for almost every aspect of social studies.

Variations in area-specific sex ratios are the result of a combination of factors, including area differences in levels of fertility and mortality, and sex-selective migration arising out of regional variations in socio-economic conditions.

There are several measures that can be used for doing inter-area or intergroup comparisons, or comparisons over time of the sex composition of the population. These include the masculinity proportion (the percentage of males in the population), or the ratio of the excess or deficit of males to the total population, or the sex ratio (the ratio of males to females in a population). The sex ratio is the most commonly used measure of the sex composition. It is a more sensitive indicator of differences in sex composition because it has a relatively smaller denominator (the population of females).

Sex ratios for rural and urban areas

The 2015 Census enumerated 2,905,097 persons in urban areas and 4,187,016 persons in rural areas. The sex composition of the population differs slightly between rural and urban areas. The urban areas had a sex ratio of 98.1 males per 100 females, while the rural population had a sex ratio of 96.1 males per 100 females (Table 3.15). Both the rural and urban populations had sex ratios lower than those before the war.

Table 3.15 Population and sex ratio by place of residence

Place of residence	Population					
	Total	Male	Female	Sex ratio	Masculinity proportion	Deficit of males (%)
All places of residence	7,092,113	3,490,978	3,601,135	96.9	49.2	-1.6
Rural	4,187,016	2,052,342	2,134,674	96.1	49.0	-2.0
Urban	2,905,097	1,438,636	1,466,461	98.1	49.5	-1.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Sex ratio for the regions and districts

Table 3.16 gives the sex ratio by region and district for all five censuses. The sex ratio of the population in the Western Region in 2015 was highest at 99.9 males per 100 females - while the other three regions were between 95 and 98 per cent.

The sex composition of the districts in the Western Region was also different from the rest of the country. In 2015, the districts of the Western Region had high sex ratios (100.1 for West Area Urban and 99.3 for West Area Rural), while the rest of the districts had sex ratios ranging between 92 and 98 males per 100 females.

Between 2004 and 2015, the sex ratio for the country increased by 2.7 percentage points. The Eastern Region had a 2.2 percentage point drop in its sex ratio while the other three regions had their sex ratios increasing, with the Northern Region having the largest increase of 6.2 percentage points.

Between 2004 and 2015, Kono, Kenema and Bo districts experienced a drop in the sex ratios. All the other districts had an increase in sex ratios, with the largest increase being observed in the two Northern region districts of Koinadugu (11.5 percentage points) and Tonkolili District (10.5 percentage points).

Table 3.16 Sex ratios of the total population by region and district, 1963 – 2015

Region/district	Sex ratio					Change in sex ratio (percentage points)	
	1963	1974	1985	2004	2015	1985 - 2004	2004 - 2015
Total country	98.4	98.8	98.7	94.2	96.9	-4.5	2.7
Eastern	***	***	***	100.6	98.4	***	-2.2
Kailahun	87.3	92.0	93.6	93.6	98.0	0.0	4.4
Kenema	117.4	104.5	104.3	102.3	97.5	-2.0	-4.8
Kono	118.1	125.8	111.8	106.0	99.8	-5.8	-6.2
Northern	***	***	***	89.2	95.4	***	6.2
Bombali	85.2	87.7	97.6	92.6	95.7	-5.0	3.1
Kambia	92.3	90.7	91.3	89.6	92.0	-1.7	2.4
Koinadugu	93.2	91.9	91.5	88.3	99.8	-3.2	11.5
Port Loko	95.5	93.2	92.2	88.2	92.1		3.9
Tonkolili	89.3	90.5	96.6	87.2	98.1		10.9
Southern	***	***	***	93.2	95.0	***	1.8
Bo	103.8	94.8	96.8	95.7	95.1	-1.1	-0.6
Bonthe	95.6	95.4	96.7	92.4	97.3	-4.3	4.9
Moyamba	94.1	93.6	93.7	89.9	93.2	-3.8	3.3
Pujehun	88.9	91.0	92.1	92.7	95.1	0.6	2.4
Western	111.4	111.1	107.6	97.2	99.9	-10.4	2.7
Western Area Rural	***	***	***	94.8	99.3	***	4.5
Western Area Urban	***	***	***	97.8	100.1	***	2.3

*** Data not available

Source: Statistics Sierra Leone, 2015 Population and Housing Census
Statistics Sierra Leone, 2004 Population and Housing Census Report

3.7 Nationality

The 2015 Census collected information on the nationality of both household and non-household population. It found that 7,052,112 (99.4 percent) were Sierra Leoneans while 40,001 (0.6 percent) were non-Sierra Leoneans.

Table 3.17 shows that 58.4 per cent of the non-Sierra Leonean population were male, while 41.6 per cent were female. The table further shows that more than half (51.4 per cent) of the non-Sierra Leonean population were of the working ages of 25-64 years, with children below 15 years making up only 24.1 per cent of the population.

The non-Sierra Leoneans were mainly enumerated in urban areas (72.4 per cent). Among the regions, most of the non-Sierra Leoneans were enumerated in the Western Region (44.5 per cent), followed by the Eastern Region (22.7 per cent). The rest were enumerated in the Southern Region (13.3 per cent) and the Northern Region (14.2 per cent).

Table 3.17 Number and percentage distribution of non-Sierra Leonean population by selected characteristics

Characteristics	Number	Percentage distribution
Total country	40,001	100.0
Sex		
Male	23,354	58.4
Female	16,647	41.6
Residence		
Rural	8,931	22.3
Urban	28,972	72.4
Region		
Eastern	9,086	22.7
Northern	5,673	14.2
Southern	5,328	13.3
Western	17,816	44.5
Age		
0–14	9,636	24.1
15–24	8,160	20.4
25–64	20,551	51.4
65+	1,654	4.1
Nationality		
African	36,244	90.6
Non-African	3,757	9.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 3.18 shows that most of the non-Sierra Leoneans (90.6 per cent) were from Africa and only 9.4 per cent were from outside Africa. The share of Africans was higher for females (93.8 per cent) than males (88.4 per cent). Regarding the individual countries, more than two-thirds of the non-Sierra Leoneans were from the neighbouring countries of Guinea Republic (56.3 per cent) and Liberia (8.6 per cent). India with 2.4 per cent and Lebanon with 2.2 per cent of the non-Sierra Leoneans had the biggest share among the non-African countries.

The non-Sierra Leonean population was highly male dominated with a sex ratio of 140.3 males per 100 females. The sex ratio was higher among the non-Africans (261.9 males per 100 females), nearly twice as high as that for the Africans (132.2 males per 100 females).

Table 3.18 Distribution of non-Sierra Leonean population by nationality and sex

Nationality	Percentage distribution			
	Total	Male	Female	Sex ratio
Total	100.0	100.0	100.0	140.3
African	90.6	88.4	93.8	132.2
Guinea Republic	56.3	53.5	60.3	124.7
Liberia	8.6	7.1	10.7	92.8
Nigeria	8.0	9.3	6.2	210.2
Mali	4.0	3.6	4.5	112.0
Ghana	3.7	4.5	2.7	234.7
Gambia	2.7	2.8	2.5	158.9
Guinea Bissau	1.7	1.6	1.9	117.0
Senegal	1.5	1.7	1.2	203.1
Togo	1.1	0.9	1.2	106.3
Cote d'Ivoire	0.7	0.7	0.7	139.0
Benin	0.4	0.5	0.2	279.5
Cape Verde	0.2	0.2	0.2	105.3
Niger	0.2	0.2	0.2	184.0
Kenya	0.2	0.2	0.2	133.3
Burkina Faso	0.1	0.1	0.1	108.7
Zambia	0.1	0.1	0.1	141.7
Other African countries	1.1	1.4	0.8	232.8
Non-African	9.4	11.6	6.2	261.9
United Kingdom	0.7	0.7	0.7	142.0
Other European countries	1.1	1.3	0.9	209.1
United States of America	0.7	0.7	0.7	129.4
India	2.4	3.6	0.6	832.7
Lebanon	2.2	2.5	1.9	189.4
Pakistan	0.3	0.3	0.3	179.5
Other	2.0	2.5	1.2	292.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

3.8 Place of Birth

The 2015 Census collected information on the place of birth for both household and institutional population. For persons born in Sierra Leone, the chiefdom of birth was recorded. For those born outside the country, the country of birth was recorded. For the purposes of this report, the analysis was done for the household population only.

Table 3.19 shows that most of the household population of Sierra Leone were born in the country. Only 0.8 per cent of the household population were born elsewhere in Africa and 0.1 per cent were born outside Africa. However, the situation in the Western Region was slightly different from the other regions. The household population born from elsewhere in Africa constituted 1.7 per cent of its population, which is more than twice as high as the national average.

Eight out of ten people were enumerated in the same district of their birth. The same pattern was observed for the regions, the only exception being the Western Region which had less than half (45.5 per cent) of its enumerated household population having been born in the same district. The share of enumerated population that were born in other regions was much lower in the Northern Region compared to the other regions, while the percentage of those enumerated in the same district as they were born (92.4) was higher than the other regions. This suggests less internal migration to the Northern Region.

Table 3.19 Distribution of the household population by region, place of birth and place of enumeration

		Place of enumeration			
Place of birth	Total country	Eastern	Northern	Southern	Western
All places of birth	100.0	100.0	100.0	100.0	100.0
Same as district of enumeration	80.1	87.2	92.4	86.7	45.5
Elsewhere in the region	4.5	3.6	4.3	5.8	4.7
Another region	14.5	8.4	3.1	7.0	47.8
Elsewhere in Africa	0.8	0.8	0.3	0.5	1.7
Outside Africa	0.1	0.0	0.0	0.0	0.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

3.9 Ethnicity

There are no universally accepted race and ethnic concepts or identities. Each nation develops and implements definitions and terms that address its own statistical and administrative needs. Many countries in the world collect vital statistics according to ethnic categories, but most countries do not compile data according to race. The 2015 Census collected information on ethnicity from the household population. The Sierra Leonean population were classified according to the 15 local ethnic groups while the non-Sierra Leoneans were classified according to their country of birth. The analysis of ethnicity was limited to the persons who belong to the local ethnic groups.

Table 3.20 shows that there were two dominant ethnic groups, each with a population of more than two million persons. The largest ethnic group was the Mende who are mainly found in the Southern and Eastern regions, followed by the Temne who are mainly found in the Northern Region. The two ethnic groups collectively constituted 63.8 per cent of the household population of the ethnic groups. The third largest group was the Limba, with 8.4 per cent of the household population, who are mainly found in the Northern Region. The four smallest ethnic groups were Vai, Krim, Yalunka and Krio, each with a population of less than 100,000 persons, and collectively constituted 2.3 per cent of the indigenous population.

Table 3.20 Classification of ethnic groups by population size

Population size	Ethnic group	Number	Population	Percent of population
All sizes		15	7,016,957	100.0
1,000,000 or more	Mende, Temne	2	4,478,443	63.8
400,000 – 999,999	Limba	1	592,190	8.4
300,000 - 399,999	Kono, Koranko	2	676,435	9.6
200,000 – 299,999	Fullah, Susu	2	470,360	6.7
100,000 - 199,999	Kisi, Loko, Madingo, Sherbo	4	636,221	9.1
Less than 99,999	Krio, Yalunka, Krim, Vai	4	163,308	2.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The distribution and sex composition of the population of the ethnic groups is quite varied, as shown in Table 3.21. The overall sex ratio for the population of a given ethnic group is expected to fall within a limited range of 95 to 102 males per 100 females. However, the sex ratios of the population of the different ethnic groups vary widely from 84 for the Vai and 111 males per 100 females for the Fullah. Six out of the 15 ethnic groups had sex ratios higher than 100. From the table, it is noted that there is no relationship between population size of the ethnic group and its sex ratio.

Table 3.21 Population size, sex ratio and percentage distribution and of the household population by sex and ethnicity

			Percentage distribution		
Ethnic group	Population	Sex ratio	Total	Male	Female
All ethnic groups	7,016,957	96.5	100.0	100.0	100.0
Mende	2,258,232	94.3	32.2	31.8	32.6
Temne	2,220,211	96.2	31.6	31.6	31.7
Limba	592,190	95.2	8.4	8.4	8.5
Kono	363,051	95.5	5.2	5.1	5.2
Koranko	313,384	100.3	4.5	4.6	4.4
Fullah	266,581	110.6	3.8	4.1	3.5
Susu	203,779	97.4	2.9	2.9	2.9
Kissi	175,843	100.8	2.5	2.6	2.5
Loko	165,692	94.2	2.4	2.3	2.4
Madingo	160,080	102.0	2.3	2.3	2.2
Sherbro	134,606	97.9	1.9	1.9	1.9
Krio	94,593	103.5	1.3	1.4	1.3
Yalunka	51,781	102.8	0.7	0.8	0.7
Krim	15,729	94.5	0.2	0.2	0.2
Vai	1,205	84.0	0.0	0.0	0.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

3.10 Language

Language is essentially a means of communication among members of a society. Sierra Leone is a multi-lingual country with English as the official language. The 2015 Census collected information on the main language and secondary language spoken by members of the household population. These included 15 local languages and three international languages. The census did not ask for the total number of languages spoken by an individual.

The most commonly spoken language nationally was Mende, spoken as the main language by 29.2 per cent (Table 3.22). This is followed by Temne (26.6 per cent) and Krio (18.2 per cent). The three dominant languages collectively were spoken as the main language by 74.5 per cent of the population. Thus, the remaining 15 local languages and international languages were spoken by about one quarter of the population.

The local language spoken reflects the ethnic composition of the area, except for the Krio language. Although only 1.3 per cent of the population were of Krio ethnic origin, Krio language was reported as the main language by 18.4 per cent of the household population.

Table 3.22 Percentage distribution of the population by main language

Main language	Population	Percentage of the population
All languages	6,954,702	100.0
Local language		
Mende	2,065,349	29.7
Temne	1,851,300	26.6
Krio	1,265,295	18.2
Limba	380,060	5.5
Kono	306,824	4.4
Koranko	277,356	4.0
Fullah	173,003	2.5
Susu	155,175	2.2
Kissi	154,341	2.2
Loko	91,668	1.3
Madingo	88,650	1.3
Sherbro	81,304	1.2
Yalunka	44,935	0.6
Krim	1,669	0.0
Vai	1,043	0.0
Foreign language	11,231	0.2
Other	5,499	0.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 3.23 shows that the Mende language was most commonly spoken as the main language in the Southern and Eastern regions, while Temne was the most commonly spoken language in the Northern Region and Krio was most dominant in the Western Region. The districts are smaller in size and generally presumed to be more homogeneous, with most of the household population speaking one of the three most common languages. The table shows that Pujehun was the most homogeneous with 93.8 per cent of the household population reporting Mende as the main language. This is followed by Port Loko (81.7 per cent) and Tonkolili (80.3 per cent) reporting Temne as the main language, while Bonthe (80.4 per cent) and Kenema (80.2 per cent) reported Mende as the main language.

Western Area Rural district had the smallest share of its population speaking one main language (Krio language) which was reported by only 38.4 per cent of the population as the main language. This was followed by Bombali district whose most dominant language was Temne (42.8 per cent) and Koinadugu district which reported 49.3 per cent speaking Koranko as the main language. The rest of the districts had more than 50 per cent of the household population reporting one language as the same main language.

Table 3.23 Distribution of the household population by region, district and most common main language

	Percentage distribution							
Region/district	Most spoken language	%	Second most spoken language	%	Third most spoken language	%	Others	Total
Total country	Mende	29.2	Temne	26.2	Krio	17.9	26.8	100.0
Eastern	Mende	53.0	Kono	17.6	Kissi	9.1	20.3	100.0
Kailahun	Mende	69.8	Kissi	22.0	Krio	3.0	5.2	100.0
Kenema	Mende	80.2	Krio	7.2	Temne	3.9	8.7	100.0
Kono	Kono	56.0	Krio	11.1	Temne	7.4	25.6	100.0
Northern	Temne	55.3	Limba	11.4	Koranko	9.5	23.8	100.0
Bombali	Temne	42.8	Limba	20.0	Krio	11.8	25.4	100.0
Kambia	Temne	53.7	Susu	20.6	Limba	15.7	10.0	100.0
Koinadugu	Koranko	49.3	Limba	14.2	Fullah	11.2	25.2	100.0
Port Loko	Temne	81.7	Krio	6.2	Susu	3.7	8.3	100.0
Tonkolili	Temne	80.3	Limba	6.9	Koranko	6.4	6.3	100.0
Southern	Mende	76.4	Temne	6.9	Krio	6.0	10.2	100.0
Bo	Mende	76.5	Krio	10.7	Temne	5.0	7.8	100.0
Bonthe	Mende	80.4	Sherbro	12.0	Krio	2.8	4.7	100.0
Moyamba	Mende	54.8	Temne	20.7	Sherbro	12.5	12.0	100.0
Pujehun	Mende	93.8	Krio	2.2	Time	0.6	3.4	100.0
Western	Krio	59.9	Temne	20.3	Mende	5.3	14.5	100.0
Western Area Rural	Krio	38.4	Temne	34.6	Mende	7.1	19.8	100.0
Western Area Urban	Krio	69.0	Temne	14.2	Mende	4.6	12.2	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The findings in Table 3.24 show that 65 per cent of the population speak at least two local languages while 27.7 per cent speak only one local language. Only 0.1 per cent of the population speak only an international language. This is mainly due to the very small proportion (0.6 per cent) of the population who are non-Sierra Leoneans. There was a small proportion (5.4 per cent) who spoke a mixture of local and foreign languages.

The Western Region had 18.1 per cent of the population speak a mixture of both local and foreign languages, compared to less than 4 per cent for the other districts or regions. The pattern by districts is fairly similar to the country as a whole, except for Bonthe and Pejehun districts which have higher proportions of persons who speak only one local language (45.6 and 46.4 per cent respectively).

Table 3.24 Distribution of the household population by region, district and number of languages spoken

	Percentage distribution					
Region/district	One local language	Two local languages	International languages	Mixed languages	Others	Total
Total country	27.7	65.0	0.1	5.4	1.7	100.0
Eastern	25.0	71.4	0.0	2.5	1.2	100.0
Kailahun	33.6	62.8	0.1	2.3	1.3	100.0
Kenema	27.1	69.3	0.0	2.7	1.0	100.0
Kono	13.5	82.8	0.0	2.4	1.3	100.0
Northern	29.2	67.1	0.0	1.4	2.3	100.0
Bombali	21.3	74.2	0.0	2.2	2.2	100.0
Kambia	34.3	61.6	0.0	0.9	3.2	100.0
Koinadugu	24.3	73.8	0.0	0.7	1.2	100.0
Port Loko	32.7	62.6	0.0	1.4	3.3	100.0
Tonkolili	34.5	62.7	0.0	1.5	1.3	100.0
Southern	34.9	60.5	0.1	2.5	2.1	100.0
Bo	28.4	66.8	0.1	3.1	1.6	100.0
Bonthe	45.6	49.9	0.0	2.8	1.7	100.0
Moyamba	27.1	67.9	0.0	1.1	3.8	100.0
Pujehun	46.4	49.3	0.1	2.7	1.5	100.0
Western	21.5	59.0	0.3	18.1	1.1	100.0
Western Area Rural	18.1	67.0	0.2	13.1	1.6	100.0
Western Area Urban	23.0	55.6	0.3	20.3	0.9	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

3.11 Religious affiliation

Religion can be defined as a belief in, and reverence for, supernatural powers. It is a system of thought, feeling and action that is shared by a group and that gives the members an object of devotion and a code of behaviour by which individuals may judge the personal and social consequences of their actions. It is a frame of reference by which individuals relate to their group and the universe.

The 2015 Census collected information on the religious affiliation of all household populations. Table 3.25 shows that Islam was the most dominant faith (77 per cent) of the Sierra Leonean household population. Those of the Christian faith combined were 21.9 per cent of the household population. A small proportion (0.3 per cent) reported having 'no religion'. There were no differences in the distribution of the population of the religious groups by sex.

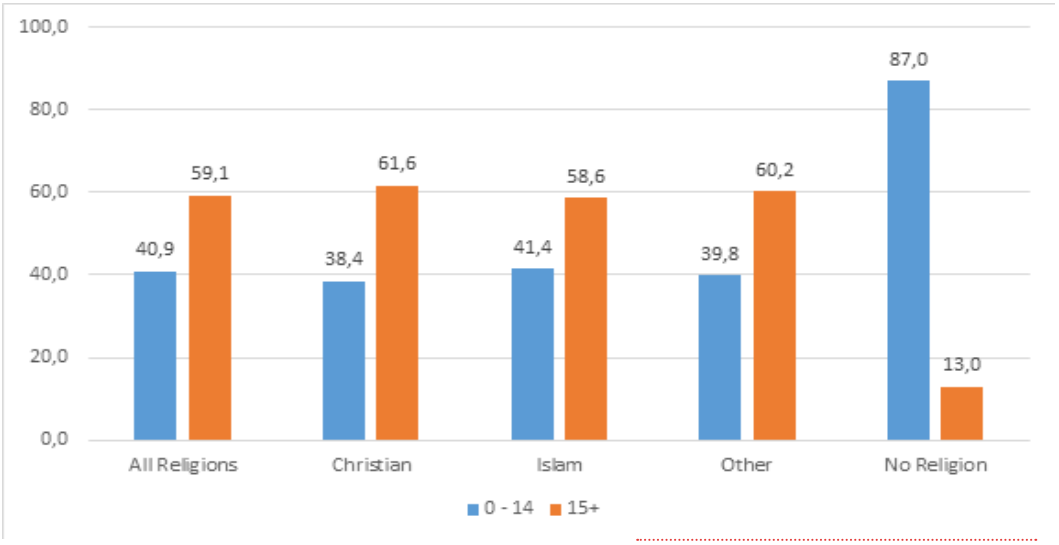
Table 3.25 Distribution of the household population by religious affiliation

	Percentage distribution				
Religious affiliation	Total	Male	Female	Sex ratio	Percentage aged less than 15 years
Total country	100.0	100.0	100.0	96.8	40.9
Catholic	7.0	7.1	7.0	98.2	38.8
Anglican	1.2	1.2	1.2	91.0	36.9
Methodist	3.0	3.0	3.0	95.0	37.3
SDA	8.0	9.3	6.2	210.2	41.2
0.7	0.7	0.7	96.6	41.2	37.6
Pentecostal	5.3	5.0	5.6	86.5	37.6
Other Christian	4.7	4.5	4.8	89.1	39.6
Islam	77.0	77.5	76.6	98.0	41.4
Bahai	0.0	0.0	0.0	98.1	36.7
Traditional	0.1	0.1	0.0	106.5	30.5
Other	0.7	0.7	0.7	94.9	40.7
No Religion	0.3	0.3	0.3	106.8	87.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Figure 3.4 shows that the age distribution of the population of the major religious groups is quite similar. Forty one per cent of Muslims were children aged less than 15 years. The corresponding figures for Christians and those of other religious groups were slightly lower at 38.4 and 39.8 per cent respectively. The major deviation is for the persons with 'no religion', 87 per cent of whom are children aged below 15 years. This could be because they are still young and are yet to choose which religious group they wish to belong to.

Figure 3.4 Distribution of the household population by age and religious affiliation



Source: Statistics Sierra Leone, 2015 Population and Housing Census

3.12 Summary, conclusion and recommendations

3.12.1 Summary

The 2015 Census enumerated a total of 7.1 million persons, of whom 3.5 million were males and 3.6 million were females.

The distribution of the population among regions did not change much between 1963 and 2004, with the Northern Region having the biggest share of the population and the Western Region having the smallest share. In 2015, however, there was a slight change with the Western Region having a marginally bigger share than the Southern Region. This shift could be partially attributed to high urbanization, especially in Freetown city.

The distribution of the population by district has also been changing. The distribution of the population among districts is not as even as it is with the regions and more uneven among the chiefdoms. In 2015, the share of the district population ranged between 2.8 per cent for Bonthe district and 14.9 per cent for Western Area Urban district.

The population of Sierra Leone has been growing since the first modern census in 1963. Between 2004 and 2015, the population increased by about 2 million persons, giving a growth rate of 3.2 per cent per annum. If this rate is maintained, the population will double in less than 22 years. The growth rate between 2004 and 2015 was much higher than the 1.8 per cent observed between 1985 and 2004.

Between 2004 and 2015, all districts experienced an increase in their respective population. The rate of increase in the district population varied widely between districts from as low as 1.8 per cent for Moyamba district to as high as 8.5 per cent for Western Area Rural district. The population density of Sierra Leone in 2015 was 97.2 persons per square kilometre.

The population density of Sierra Leone was much higher than those for the neighbouring countries of Liberia and Guinea, as well as for Africa. The population density was not uniform across the country. Koinadugu district was sparsely populated with a population density of only 33 persons per square kilometer, while Western Area Urban district, which had the least share of the land area and the biggest share of the population, had a population density of 12,878 persons per square kilometre.

Prior to the civil of 1991 to 2002, the population of Sierra Leone was almost numerically balanced between the sexes, with the sex ratios close to 100. The 2004 Census, which was conducted after the Civil War, gave a lower sex ratio of 94.2 males per 100 females. The 2015 Census gave a higher sex ratio of 96.9 males per 100 females, but still lower than those of the pre-war era.
The age composition shows that the population is quite young with 40.8 per cent of the population being aged below 15 years and only 3.5 per cent aged 65 years and above. The working-age population (15-64 years) constituted 55.7 per cent. The median age of the population was 18.7 years, a decrease from 19.4 years in 1985. The age distribution of Sierra Leone was quite like the age distribution for Africa as whole in 2015.

Between 2004 and 2015, the share of the working age population increased from 53.9 to 55.7 per cent. Most of this increase was among the population aged 15–24 years. The increase in the proportion of the population in the working age group resulted in a decrease in the dependency ratio from 89.4 per cent in 1985 to 79.5 per cent in 2015. The age structure of the Western Region was quite different from the rest of the country. The region had its population concentrated in the working ages, leading to its median age being higher than the other three regions.

Most of the population of were of Sierra Leonean origin, with only 40,001 out of the 7.1 enumerated population (0.6 per cent) being non-Sierra Leoneans. The majority (72.9 per cent) of the non-Sierra Leoneans were from neighbouring countries of Guinea Republic, Liberia and Nigeria.

Sierra Leone has 15 local ethnic groups, but nearly three-quarters of the population belonged to the three dominant ethnic groups namely Mende, Temne and Limba, and the most dominant main languages were Mende, Temne and Krio. The Mende language was the most commonly spoken main language in Southern and Eastern regions, while Temne was most commonly spoken in the Northern Region and Krio was most dominant in the Western Region. More than three-quarters of the population were of the Islamic faith.

3.12.2 Conclusion

The population of Sierra Leone has continued to grow, with the rate of growth varying between districts. The rapid growth of the Western Region has led to a shift in the fifty-year old pattern of distribution of the population, with the Southern Region becoming the least populous region.

The age distribution of Sierra Leonean population is becoming younger, arising out of an increased share of the working age population, especially adolescents (15–24 years). This has led to a reduction in the overall and child dependency burden. This provides potential for the country to reap the benefits of the demographic dividend.

The population of Sierra Leone is homogeneous in terms of nationality, ethnicity, languages spoken and religion. This eases the process of implementing changes for socio-economic development.

3.12.3 Recommendations

The population of Sierra Leone is growing at a very fast rate. If the growth rate continues unchecked, the population will double in the next 22 years. This would put a heavy burden on service delivery. Appropriate fertility reduction measures should be put in place to manage the population growth.

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APPENDIX

Table A3.1 Total population by region, district and sex, 1963-2015

	Percentage distribution				2015 Census		
Region/district	1963	1974	1985	2004	Total	Male	Female
Sierra Leone	2,180,355	2,735,159	3,515,812	4,976,871	7,092,113	3,490,978	3,601,135
Eastern	545,579	775,931	960,551	1,191,539	1,642,370	814,441	827,929
Kailahun	150,236	180,365	233,839	358,190	526,379	260,586	265,793
Kenema	227,428	266,636	337,055	497,948	609,891	301,104	308,787
Kono	167,915	328,930	389,657	335,401	506,100	252,751	253,349
Northern	897,566	1,046,158	1,259,641	1,745,553	2,508,201	1,224,828	1,283,373
Bombali	198,776	233,626	317,729	408,390	606,544	296,683	309,861
Kambia	137,806	155,341	186,231	270,462	345,474	165,541	179,933
Koinadugu	129,061	158,626	183,286	265,758	409,372	204,498	204,874
Port Loko	247,463	292,244	329,344	453,746	615,376	294,954	320,422
Tonkolili	184,460	206,321	243,051	347,197	531,435	263,152	268,283
Southern	542,187	596,758	741,377	1,092,657	1,441,308	702,151	739,157
Bo	209,754	217,711	268,671	463,668	575,478	280,569	294,909
Bonthe	80,139	87,561	105,107	139,687	200,781	99,014	101,767
Moyamba	167,425	188,745	250,514	260,910	318,588	153,699	164,889
Pujehun	84,869	102,741	117,185	228,392	346,461	168,869	177,592
Western	195,023	316,312	554,243	947,122	1,500,234	749,558	750,676
Western Area Rural	67,106	40,065	84,467	174,249	444,270	221,351	222,919
Western Area Urban	127,917	276,247	469,776	772,873	1,055,964	528,207	527,757

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table A3.2 Total population by age group and sex, Sierra Leone 1985-2015

	1974			1985		
Age group	Total	Male	Female	Total	Male	Female
All age groups	4,963,000	1,359,000	1,376,000	3,491,913	1,724,908	3,601,135
0–4	440,000	217,000	223,000	574,756	289,402	285,354
5–9	418,000	210,000	208,000	528,725	266,126	262,599
10–14	252,000	135,000	117,000	344,065	182,381	161,684
15–19	238,000	110,000	129,000	341,742	160,005	181,737
20-24	204,000	93,000	111,000	271,890	121,648	150,242
25-29	233,000	108,000	125,000	281,649	125,241	156,408
30-34	185,000	87,000	98,000	219,607	99,682	119,925
35-39	166,000	83,000	83,000	197,844	97,345	100,499
40-44	129,000	66,000	63,000	146,662	72,488	74,174
45-49	108,000	59,000	50,000	128,636	69,636	59,000
50-54	87,000	47,000	40,000	103,525	53,820	49,705
55-59	58,000	32,000	26,000	73,923	40,485	33,438
60-64	66,000	35,000	32,000	77,824	39,791	38,033
65+	146,000	76,000	70,000			
65-69	***	***	***	55,952	29,445	26,507
70-74	***	***	***	45,199	24,604	20,595
75-79	***	***	***	33,393	8,491	14,902
80-84	***	***	***	25,696	13,104	2,592
85-89	***	***	***	18,141	9,634	8,507
90+	***	***	***	22,684	11,580	11,104

*** Data not available

Source: Statistics Sierra Leone, 2015 Population and Housing Census, Annual Statistical Digest 2005/2006, The 1985 Census Analytical Report

Table A3.2 Total population by age group and sex, Sierra Leone 1985-2015 (continued)

	2004			2015		
Age group	Total	Male	Female	Total	Male	Female
All age groups	4,963,000	2,410,000	2,553,000	7,092,113	3,490,978	3,601,135
0–4	758,000	377,000	381,000	938,453	469,092	469,361
5–9	743,000	369,000	374,000	1,108,715	555,292	553,423
10–14	569,000	293,000	276,000	847,292	431,588	415,704
15–19	540,000	263,000	277,000	873,620	430,792	442,828
20-24	417,000	190,000	227,000	662,819	308,135	354,684
25-29	408,000	183,000	225,000	607,983	277,618	330,365
30-34	315,000	142,000	173,000	434,203	199,964	234,239
35-39	302,000	140,000	162,000	421,172	201,459	219,713
40-44	215,000	106,000	109,000	299,215	154,121	145,094
45-49	178,000	95,000	83,000	242,188	133,783	108,405
50-54	129,000	65,000	64,000	186,793	99,050	87,743
55-59	85,000	44,000	41,000	110,449	59,261	51,188
60-64	88,000	39,000	49,000	112,682	53,987	58,695
65+	216,000	104,000	112,000			
65-69	***	***	***	73,722	36,414	37,308
70-74	***	***	***	65,568	30,606	34,962
75-79	***	***	***	39,728	20,044	19,684
80-84	***	***	***	31,359	13,177	18,182
85-89	***	***	***	15,888	7,258	8,630
90+	***	***	***	20,264	9,337	10,927

*** Data not available

Source: Statistics Sierra Leone, 2015 Population and Housing Census, Annual Statistical Digest 2005/2006, The 1985 Census Analytical Report

Table A3.3 Selected characteristics of the population of chiefdoms, Sierra Leone 2004-2015

District/ chiefdom	2004 Population	2015 Population	Sex ratio	Share of the district population	Percentage change	Annual growth rate
Sierra Leone	4,976,871	7,092,113	96.8		42.5	3.2
Kailahun						
Dea	9,876	13,414	98.4	2.5	35.8	2.8
Jawie	42,639	50,951	95.8	9.7	19.5	1.6
Kissi Kama	12,972	20,421	99.8	3.9	57.4	4.1
Kissi Teng	30,455	45,149	103.3	8.6	48.2	3.6
Kissi Tongi	33,457	50,950	102.6	9.7	52.3	3.8
Kpeje Bongre	12,700	25,169	91.5	4.8	98.2	6.2
Kpeje West	13,010	27,544	105.4	5.2	111.7	6.8
Luawa	65,500	81,044	91.0	15.4	23.7	1.9
Malema	23,298	37,095	104.8	7.0	59.2	4.2
Mandu	19,708	30,984	91.3	5.9	57.2	4.1
Njaluahun	37,484	61,216	102.3	11.6	63.3	4.5
Penguia	12,518	26,272	100.9	5.0	109.9	6.7
Upper Bambara	28,438	26,848	91.0	5.1	-5.6	-0.5
Yawei	16,135	29,322	96.7	5.6	81.7	5.4
Kenema						
Dama	26,157	30,751	91.8	5.0	17.6	1.5
Dodo	14,194	22,858	105.6	3.7	61.0	4.3
Gaura	17,361	18,217	91.6	3.0	4.9	0.4
Gorama Mende	32,539	43,359	99.4	7.1	33.3	2.6
Kandu Lekpeama	21,743	18,229	103.6	3.0	-16.2	-1.6
Koya	10,184	13,482	99.7	2.2	32.4	2.6
Langrama	4,356	3,584	87.5	0.6	-17.7	-1.8
Lower Bambara	78,389	76,281	105.7	12.5	-2.7	-0.2
Malegohun	12,224	20,544	98.5	3.4	68.1	4.7
Niawa	8,496	7,815	88.1	1.3	-8.0	-0.8
Nomo	4,105	5,491	107.0	0.9	33.8	2.6

Table A3.3 Selected characteristics of the population of chiefdoms, Sierra Leone 2004-2015 (continued)

District/ chiefdom	2004 Population	2015 Population	Sex ratio	Share of the district population	Percentage change	Annual growth rate
Kenema						
Nongowa	51,486	45,562	93.5	7.5	-11.5	-1.1
Simbaru	18,375	17,397	98.7	2.9	-5.3	-0.5
Small Bo	31,193	29,498	92.0	4.8	-5.4	-0.5
Tunkia	21,330	36,054	98.0	5.9	69.0	4.8
Wandor	17,414	20,326	102.2	3.3	16.7	1.4
Kenema City	128,402	200,443	95.1	32.9	56.1	4.0
Kono						
Fiama	9,091	15,455	95.4	3.1	70.0	4.8
Gbane	14,813	24,404	99.2	4.8	64.7	4.5
Gbane Kandor	4,163	11,903	90.7	2.4	185.9	9.6
Gbense	24,599	15,864	96.5	3.1	-35.5	-4.0
Penguia	12,518	26,272	100.9	5.0	109.9	6.7
Gorama Kono	11,643	18,294	102.1	3.6	57.1	4.1
Kamara	12,538	19,412	111.1	3.8	54.8	4.0
Lei	16,452	26,966	93.2	5.3	63.9	4.5
Mafindor	6,801	13,703	95.3	2.7	101.5	6.4
Nimikoro	44,295	61,225	108.7	12.1	38.2	2.9
Nimiyama	26,140	28,168	106.2	5.6	7.8	0.7
Sandor	49,971	89,879	97.0	17.8	79.9	5.3
Soa	21,249	39,250	94.7	7.8	84.7	5.6
Tankoro	11,014	8,501	103.9	1.7	-22.8	-2.4
Toli	2,607	5,046	91.4	1.0	93.6	6.0
Koidu/New	80,025	128,030	99.4	25.3	60.0	4.3
Bombali						
Biriwa	28,175	47,305	92.4	7.8	67.9	4.7
Bombali Sebora	22,802	36,413	95.3	6.0	59.7	4.3
Gbanti-Kamaranka	26,126	28,491	96.8	4.7	9.1	0.8

Table A3.3 Selected characteristics of the population of chiefdoms, Sierra Leone 2004-2015 (continued)

District/ chiefdom	2004 Population	2015 Population	Sex ratio	Share of the district population	Percentage change	Annual growth rate
Bombali						
Gbendembu Ngowahun	29,971	38,800	91.1	6.4	29.5	2.3
Libeisaygahun	13,355	16,199	92.8	2.7	21.3	1.8
Magbaimba Ndor-hahun	8,655	12,688	100.1	2.1	46.6	3.5
Makari Gbanti	41,186	81,345	95.7	13.4	97.5	6.2
Paki Masabong	17,320	19,880	91.3	3.3	14.8	1.3
Safroko Limba	21,199	31,256	88.6	5.2	47.4	3.5
Sanda Loko	27,667	45,075	97.7	7.4	62.9	4.4
Sanda Tendaren	18,840	26,228	101.0	4.3	39.2	3.0
Sella Limba	52,579	58,401	95.3	9.6	11.1	1.0
Tambakka	17,675	38,493	102.2	6.3	117.8	7.1
Makeni City	82,840	125,970	97.0	20.8	52.1	3.8
Kambia						
Bramaia	25,392	36,764	89.5	10.6	44.8	3.4
Gbinle-Dixing	19,569	23,433	91.1	6.8	19.7	1.6
Magbema	67,211	92,165	92.3	26.7	37.1	2.9
Mambolo	33,825	37,952	89.4	11.0	12.2	1.0
Masungbala	28,502	31,797	87.0	9.2	11.6	1.0
Samu	56,857	64,790	91.5	18.8	14.0	1.2
Tonko Limba	39,106	58,573	98.0	17.0	49.8	3.7
Koinadugu						
Dembelia Sinkunia	13,921	21,449	102.2	5.2	54.1	3.9
Diang	19,700	29,063	102.3	7.1	47.5	3.5
Follosaba Dem-belia	14,552	20,919	98.6	5.1	43.8	3.3
Kasunko	20,357	24,796	89.8	6.1	21.8	1.8
Mongo	29,294	47,836	97.0	11.7	63.3	4.5

Table A3.3 Selected characteristics of the population of chiefdoms, Sierra Leone 2004-2015(continued)

District/ chiefdom	2004 Population	2015 Population	Sex ratio	Share of the district population	Percentage change	Annual growth rate
Koinadugu						
Neya	33,426	42,704	103.7	10.4	27.8	2.2
Nieni	39,107	78,199	98.5	19.1	100.0	6.3
Sengbe	22,458	38,016	96.0	9.3	69.3	4.8
Sulima	20,062	35,639	110.2	8.7	77.6	5.2
Wara Wara Bafodia	25,713	34,606	100.2	8.5	34.6	2.7
Wara Wara Yagala	27,168	36,145	98.0	8.8	33.0	2.6
Port Loko						
Bkm	32,174	40,179	91.3	6.5	24.9	2.0
Buya Romende	27,881	34,281	88.4	5.6	23.0	1.9
Dibia	15,077	15,519	87.7	2.5	2.9	0.3
Kaffu Bullom	69,637	120,490	96.4	19.6	73.0	5.0
Koya	63,614	85,177	89.0	13.8	33.9	2.7
Lokomasama	72,348	78,276	90.7	12.7	8.2	0.7
Maforki	68,042	86,764	90.6	14.1	27.5	2.2
Marampa	36,108	59,323	94.1	9.6	64.3	4.5
Masimera	32,845	40,843	89.8	6.6	24.4	2.0
Sanda Magbolontor	15,088	23,731	88.8	3.9	57.3	4.1
Tms	20,932	30,793	97.4	5.0	47.1	3.5
Tonkolili						
Gbonkolenken	47,838	67,705	97.9	12.7	41.5	3.2
Kafe Simira	19,817	36,670	101.5	6.9	85.0	5.6
Kalansogoia	16,406	35,864	100.5	6.7	118.6	7.1
Kholifa Mabang	12,460	16,666	92.2	3.1	33.8	2.6
Kolifa Rowalla	47,675	66,128	98.1	12.4	38.7	3.0
Kunike Barina	13,411	25,245	109.0	4.8	88.2	5.8
Kunike Sanda	42,968	74,415	101.7	14.0	73.2	5.0

Table A3.3 Selected characteristics of the population of chiefdoms, Sierra Leone 2004-2015 (continued)

District/ chiefdom	2004 Population	2015 Population	Sex ratio	Share of the district population	Percentage change	Annual growth rate
Tonkolili						
Malal Mara	14,025	30,953	95.1	5.8	120.7	7.2
Sambaya	22,728	31,993	96.2	6.0	40.8	3.1
Tane	22,242	33,285	96.1	6.3	49.6	3.7
Yoni	87,627	112,511	94.3	21.2	28.4	2.3
Bo						
Badjia	7,698	8,135	95.9	1.4	5.7	0.5
Bagbo	24,834	25,884	97.9	4.5	4.2	0.4
Bagbwe	10,904	20,926	99.6	3.6	91.9	5.9
Baoma	50,937	45,835	96.3	8.0	-10.0	-1.0
Bumpe Ngawo	35,642	44,279	96.4	7.7	24.2	2.0
Gbo	5,050	5,403	98.1	0.9	7.0	0.6
Jaiama-Bongor	26,067	31,298	94.5	5.4	20.1	1.7
Kakua	29,770	51,074	91.3	8.9	71.6	4.9
Komboya	15,616	15,623	97.0	2.7	0.0	0.0
Lugbu	23,639	25,453	96.7	4.4	7.7	0.7
Niawa Lenga	11,109	13,955	94.8	2.4	25.6	2.1
Selenga	5,412	9,175	91.2	1.6	69.5	4.8
Tikonko	39,399	53,206	96.2	9.2	35.0	2.7
Valunia	17,741	35,558	104.6	6.2	100.4	6.3
Wunde	9,893	15,305	89.8	2.7	54.7	4.0
Bo City	149,957	174,369	92.4	30.3	16.3	1.4
Bonthe						
Bendu Cha	4,680	7,168	95.4	3.6	53.2	3.9
Bum	18,827	24,339	94.7	12.1	29.3	2.3
Dema	5,301	7,411	102.4	3.7	39.8	3.0
Imperi	17,576	33,394	103.9	16.6	90.0	5.8

Table A3.3 Selected characteristics of the population of chiefdoms, Sierra Leone 2004-2015 (continued)

District/ chiefdom	2004 Population	2015 Population	Sex ratio	Share of the district population	Percentage change	Annual growth rate
Bonthe						
Jong	28,495	33,816	95.4	16.8	18.7	1.6
Kpanga Kemo	7,661	10,438	94.0	5.2	36.2	2.8
Kwamebai Krim	7,715	14,289	95.4	7.1	85.2	5.6
Nongoba Bullom	13,617	20,060	99.6	10.0	47.3	3.5
Sittia	13,449	21,347	97.2	10.6	58.7	4.2
Sogbini	7,853	10,863	93.1	5.4	38.3	2.9
Yawbeko	4,773	7,581	93.8	3.8	58.8	4.2
Bonthe Municipal	9,740	10,075	95.6	5.0	3.4	0.3
Moyamba						
Bagruwa	18,989	27,623	98.5	8.7	45.5	3.4
Bumpeh	32,363	37,445	90.8	11.8	15.7	1.3
Dasse	10,879	13,217	93.0	4.1	21.5	1.8
Fakunya	22,327	27,646	90.5	8.7	23.8	1.9
Kagboro	31,150	34,862	93.1	10.9	11.9	1.0
Kaiyamba	21,669	25,749	91.4	8.1	18.8	1.6
Kamajei	8,549	10,165	94.3	3.2	18.9	1.6
Kongbora	11,331	10,328	93.1	3.2	-8.9	-0.8
Kori	29,043	30,514	94.1	9.6	5.1	0.4
Kowa	7,082	9,752	90.8	3.1	37.7	2.9
Lower Banta	25,954	37,317	94.5	11.7	43.8	3.3
Ribbi	25,163	33,165	90.2	10.4	31.8	2.5
Timdale	8,192	10,292	100.4	3.2	25.6	2.1
Upper Banta	8,219	10,513	99.6	3.3	27.9	2.2
Pujehun						
Barri	32,245	36,905	92.1	10.7	14.5	1.2
Gallinas Peri	27,072	54,691	95.5	15.8	102.0	6.4

Table A3.3 Selected characteristics of the population of chiefdoms, Sierra Leone 2004-2015(continued)

District/ chiefdom	2004 Population	2015 Population	Sex ratio	Share of the district population	Percentage change	Annual growth rate
Pujehun						
Kpaka	12,827	16,468	88.3	4.8	28.4	2.3
Kpanga-Kabonde	33,270	49,340	94.0	14.2	48.3	3.6
Makpele	21,955	31,080	98.3	9.0	41.6	3.2
Malen	22,090	49,263	104.4	14.2	123.0	7.3
Mano Sakrim	7,536	12,893	89.4	3.7	71.1	4.9
Panga Krim	6,651	8,969	91.9	2.6	34.9	2.7
Pejeh	10,334	13,600	93.6	3.9	31.6	2.5
Soro Gbema	31,977	42,292	92.2	12.2	32.3	2.5
Sowa	15,402	17,136	96.8	4.9	11.3	1.0
Ykk	7,033	13,824	90.5	4.0	96.6	6.1
Western Area Rural						
Koya	22,996	70,423	95.4	15.9	206.2	10.2
Mountain	9,925	30,488	110.4	6.9	207.2	10.2
Waterloo	77,791	213,778	96.4	48.1	174.8	9.2
York Rural	63,537	129,581	103.3	29.2	103.9	6.5
Western Area Urban						
Central 1	50,271	62,499	103.2	5.9	24.3	2.0
Central 2	20,135	21,413	104.5	2.0	6.3	0.6
East 1	55,166	61,244	97.9	5.8	11.0	1.0
East 2	79,934	89,530	101.9	8.5	12.0	1.0
East 3	316,409	448,572	98.3	42.5	41.8	3.2
West 1	46,319	53,981	96.5	5.1	16.5	1.4
West 2	91,345	130,149	98.2	12.3	42.5	3.2
West 3	113,294	188,576	101.5	17.9	66.4	4.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

CHAPTER 4: HOUSEHOLD SIZE, STRUCTURE AND COMPOSITION

4.1 Introduction

The household is the basic socio-economic unit in many communities and is central to the study of social and economic development. The study of household structures provides information about residence patterns and social organization of the population. The population of any given community is largely an aggregation of the population of the individual households. Therefore, characteristics of the population are reflected within households. Households are also useful in investigating individual relationships. In Africa generally, social intervention and development programmes are targeted at the household.

Household members are not necessarily related by blood or marriage but live together and belong to one consumption unit. Households have been used in data collection exercises because they are handy in ensuring no omission or double counting, which is one of the primary objectives in data collection.

Households are also important not only as a way of organizing the population but as economic entities. Households are producers of different goods and services as well as being the final consumers of goods and services produced by firms. Differences in household structure reflect major differences between societies: in culture and norms; in the cost and availability of housing; in the economic means available to diverse groups in society; and in social policy, where differences in tax and benefit regimes may lead to radically different patterns of household structure. Therefore, the size and structure of households and changes in the rate of household formation are useful for development planning and service delivery.

Families on the other hand are kinship groupings that are related, but not necessarily localized. The family remains the central element of contemporary life, despite the changing lifestyles and ever-increasing personal mobility that characterize modern society. It offers companionship, security, and a measure of protection against an often-uncaring world.
There are two major types of family ties that inform household formation, namely the nuclear and extended family systems. The nuclear family is made up of the head, spouse and children (adopted and/or biological), while the extended family consists of the nuclear family and other relatives.

4.2 Definition of concepts

The 2015 Census defined a household as 'a person or group of persons who normally eat and live together and recognize a particular person as the head'. In the case of a man with several wives who maintains separate living quarters for his wives and their children, each wife and her children were enumerated as a separate household. Visitors who spent the census night with the household were also enumerated as members of the household.

A household member is any person who spent the census night in the household, and any persons who would normally have slept there but were absent on census night and did not sleep in any other house. These persons included night watchmen, police officers on night duty, persons on fishing expeditions and persons who were working in hospitals, hotels or prisons throughout the night.

The census defined the head of household as 'that person whom the members of the household accept as their head'. He or she may or may not be the sole provider for the household.

The household size refers to the number of usual members of a household. The mean household size is obtained by dividing the total household population by the number of households.

Household structure refers to the type of relationship (whether related or unrelated) between household members who were present on census night, while household composition refers to the patterns of relationships between the head of household and other members of the household. This includes relationships such as spouse (wife/husband), child (son/daughter), grandchild, parent/parent-in-law, brother/sister, other relative and non-relative.

The 2015 Census used similar definitions for the household and household head used in the 1985 Census, making both sets of data comparable. However, the detailed analysis of the 1974, 1985 and 2004 data are retained only as an indicator of trends in household size, structure and family composition for the total country.

4.3 Sources of data and their limitations

The household questionnaire is the source of the information used to analyse the household size, structure and composition. Information was collected on the relationship of every household member to the head of household. This is the basis for constituting the households and hence this study.

The 2015 Census enumeration was of a de facto nature, and therefore the resultant data have some limitations, as listed below:

a) The household is defined in a census setting, to ensure completeness of enumeration and to avoid omission or double counting of persons. Thus, the census exercise cannot be used to identify persons who belong to more than one household simultaneously, such as a polygamous man, even though such situations are known to exist.

b) Some usual household members may not have been enumerated in the household while some non-members were enumerated within the household. Therefore, the definition and analysis of the household size, structure and composition is for the de facto households as they were composed on the census night, which is not necessarily their usual structure. Because of the high sensitivity of the household structures, inclusion or exclusion of an individual may lead to a change in the structure of the household. A more complicated form of this limitation is when the de jure household head is absent, and the headship is temporarily assumed by another household member on the census night. This may result in a complete transformation of the household structure.

c) The classification of households is based on the question on 'relationship to household head'. This has the limitation that one cannot identify and study relationships of sub-families within the household.

4.4 Distribution of households

The 2015 Census enumerated a total of 1.3 million households. The number of households enumerated in the different censuses has been increasing over time (Table 4.1). The number of households increased from 485,711 in 1985 to 819,854 in 2004 and nearly 1.3 million in 2015. Between 1985 and 2004, the number of households increased by 68.8 per cent while between 2004 and 2015, the increase was 54.4 per cent.

The proportional increase in the number of households between 2004 and 2015 was higher than the corresponding increase in the household population. Whereas the number of households increased by 54.4 per cent, the household population increased by 43.5 per cent. The same pattern was observed during the period 1985 to 2004.

Table 4.1 Number of households and household population, 1985-2015

	Census year			Percentage change	
Characteristic	1985	2004	2015	1985-2004	2004-2015
Households	485,711	819,854	1,265,468	68.8	54.4
Rural	***	***	697,734	***	***
Urban	***	***	567,734	***	***
Household population	3,211,239	4,930,532	7,076,119	53.5	43.5
Rural	***	***	4,182,612	***	***
Urban	***	***	2,893,507	***	***
Total population	3,515,812	4,976,871	7,092,113	41.6	42.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

*** Data not available

4.4.1 Distribution of households by region and district

According to Table 4.2, nearly one third of the households (32.7 per cent) in 2015, were found in the Northern Region while about one quarter (25.4 per cent) were found in the Western Region. The Southern Region had the least share of the households (19.6 per cent). More than half of the urban households (55.0 per cent) were found in the Western Region whereas the Northern Region had the biggest share (44.0 per cent) of the rural households.

Out of the 1.3 million households enumerated, 567,734 (44.9 per cent) were numerated in urban areas. Almost all households in the Western Region (97.2 per cent) were enumerated in urban areas, compared to only 19.9 per cent in the Southern Region.

Table 4.2 Distribution of households by region and place of residence

	Place of residence			
Region	All places of residence	Rural	Urban	Percent urban
Total	100.0	100.0	100.0	44.9
Eastern	22.2	26.2	17.4	35.1
Northern	32.7	44.0	18.9	25.9
Southern	19.6	28.6	8.7	19.9
Western	25.4	1.3	55.0	97.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 4.3 shows that among the districts, Western Area Urban district had the largest share of households (18.2 per cent) in 2015, while Bonthe district had the lowest share in 2015 (2.6 per cent). The rest of the districts had between 4 and 9 per cent of the households.

Between 2004 and 2015, Western Area Rural district experienced the highest increase in the number of households (204 per cent), leading to an increase in its share from 3.7 per cent in 2004 to 7.2 per cent in 2015. The other districts with substantial relative increases in the number of households between 2004 and 2015 were Western Area Urban district (71.4 per cent), Bombali (71.1 per cent) and Port Loko (70.3 per cent).

The rest of the districts had increases during 2004 to 2015 of between 26 and 65 per cent. Kenema district had the lowest relative increase in the number of households of 26.2 per cent. Most districts had a higher relative increase in the number of households during the period 2004 to 2015 compared to the period 1985 to 2004. The only exceptions to this were Kono and Moyamba districts.

Table 4.3 Distribution and percentage change in number of households by region and district, 1985-2015

Region/district	Number of households in 2015	Distribution of households			Percentage change	
		1985	2004	2015	1985-2004	2004-2015
Total	1,265,468	100.0	100.0	100.0	68.8	54.4
Eastern	281,201	29.3	25.9	22.2	52.7	32.4
Kailahun	83,348	7.5	7.9	6.6	82.6	28.4
Kenema	111,734	11.1	10.8	8.8	67.8	26.2
Kono	86,119	10.7	7.2	6.8	16.1	46.4
Northern	414,377	30.8	31.9	32.7	78.3	58.6
Bombali	105,902	7.3	7.6	8.4	78.3	71.1
Kambia	53,826	4.5	4.5	4.3	74.3	44.9
Koinadugu	56,108	6.7	5.3	4.4	38.2	28.4
Port Loko	111,701	6.2	8.0	8.8	122.8	70.3
Tonkolili	86,840	6.2	6.4	6.9	79.5	64.3
Southern	248,655	24.0	22.2	19.6	60.0	36.5
Bo	102,723	9.2	9.2	8.1	72.8	35.5
Bonthe	32,538	3.5	3.1	2.6	51.5	27.7
Moyamba	61,880	7.0	5.5	4.9	35.9	36.8
Pujehun	51,514	3.9	4.3	4.1	90.9	44.5
Western	321,235	15.9	20.0	25.4	117.0	95.6
Western Area Rural	91,284	1.9	3.7	7.2	236.7	203.7
Western Area Urban	229,951	14.1	16.4	18.2	101.0	71.4

4.5 Household size

The 2015 Sierra Leone census was of a de facto nature. Therefore, the household size presented in this section refers to the number of persons who spent the census night in the household, irrespective of whether it was their usual household or not. Table 4.4 shows the distribution of the households by number of persons present on the census night. The table shows that 6.4 per cent of all households were single-person households, compared to 11.1 per cent in 1985. The single person households were more common in urban areas (10.4 per cent) as well as among male-headed households (6.8 per cent).

Sierra Leone has traditionally had large household sizes. The proportion of households with 10 or more persons was 11.6 (about one in every nine households), although it is a substantial reduction from the 21.5 per cent from the 1985 Sierra Leone census. The very large households with 15 or more persons constituted 1.3 per cent of the households in 2015.The most common household size was five persons, although they constituted 14.0 per cent of all households. Among the female-headed households, the largest share (15.3 per cent) was a household with four persons. The modal household size for urban areas was four persons while that for rural areas was five persons.

Table 4.4 Distribution of households by household size, place of residence and sex of household head

Household size	All places of residence			Rural			Urban		
	Total	Male headed	Female headed	Total	Male headed	Female headed	Total	Male headed	Female headed
All sizes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1	6.4	6.8	5.5	3.2	2.9	4.0	10.4	11.7	7.2
2	8.3	7.8	9.8	5.9	5.0	8.3	11.3	11.2	11.7
3	11.9	11.1	14.2	10.5	9.3	13.7	13.7	13.2	14.8
4	13.7	13.1	15.3	13.4	12.6	15.6	14.1	13.8	15.0
5	14.0	13.7	14.6	14.8	14.6	15.5	12.9	12.6	13.4
6	11.8	12.0	11.5	13.2	13.4	12.4	10.2	10.2	10.4
7	9.4	9.8	8.6	10.8	11.4	9.3	7.8	7.8	7.7
8	7.5	7.9	6.7	8.9	9.5	7.4	5.8	5.8	5.9
9	5.2	5.5	4.5	6.2	6.7	4.8	4.0	4.0	4.0
10	7.8	8.4	6.4	9.9	10.9	7.2	5.3	5.3	5.3
11	0.8	0.8	0.7	0.6	0.7	0.4	1.0	0.9	1.0
12	0.7	0.8	0.6	0.6	0.7	0.4	0.9	0.9	0.9
13	0.6	0.6	0.5	0.5	0.5	0.3	0.7	0.6	0.7
14	0.4	0.4	0.3	0.3	0.4	0.2	0.5	0.5	0.5
15+	1.3	1.4	0.9	1.1	1.3	0.5	1.5	1.5	1.4
Mean size	5.6	5.7	5.3	6.0	6.2	5.4	5.1	5.1	5.2
Modal size	5	5	4	5	5	4	4	4	4

The mean household size for the Sierra Leonean population has been declining consistently overtime from 6.6 persons in 1985 to 6.0 persons in 2004 and 5.6 persons in 2015. The mean household size in 2015 was smaller for urban areas (5.1 persons) compared to the rural areas (6.0 persons), as well as for female-headed households (5.3 persons) compared to male-headed households (5.7 persons). There is a very small difference (0.1 persons) in mean household size by sex of household head in the urban areas compared to the one for rural areas (0.8 persons).

4.5.1 Household size by region and district

Household sizes tend to differ by place of residence and geographical location. Table 4.5 shows that single-person households were more common in the Western Region (12.4 per cent) compared to the other three regions. The Northern Region had the least proportion of single-person households (3.9 per cent). The districts of the Western Region had high shares of single-person households. Among the 12 districts of the other three regions, six districts of Port Loko, Kono, Bombali, Kenema, Bo and Moyamba had single-person households, constituting between five and nine persons of their total households.

Koinadugu district had about one quarter (24.6 per cent) of its households having 10 or more persons. This was closely followed by Pejehun district with 21.0 per cent of the households having 10 or more persons. The rest of the districts had less than 20 per cent of their households with 10 persons or more. The districts of Moyamba, Western Area Rural and Western Area Urban had less than 10 per cent of their households with 10 or more persons.

Wide variability was observed in the mean household size of the districts. Generally, the districts of the Eastern and Northern regions (except Kenema and Port Loko districts) had mean household sizes bigger than the national average (5.6 persons), while those of the Western Region had mean household sizes lower than the national average. The Southern Region had half of the districts with household sizes bigger than the national average.

Table 4.5 Distribution of households and mean household size by region and district

Region/district	Number of persons in the household							Mean household size
	1	2 - 3	4 - 5	6 - 7	8 - 9	10+	Total	
Total	6.4	20.3	27.7	21.3	12.7	11.6	100.0	5.6
Eastern	4.5	16.8	28.3	24.0	14.8	11.6	100.0	5.8
Kailahun	2.0	11.8	26.7	27.3	19.6	12.7	100.0	6.3
Kenema	5.8	21.1	30.4	21.3	11.3	10.1	100.0	5.5
Kono	5.3	16.2	27.2	24.3	14.7	12.4	100.0	5.9
Northern	3.9	16.3	27.5	23.5	15.2	13.7	100.0	6.0
Bombali	5.8	18.5	28.1	23.0	13.2	11.4	100.0	5.7
Kambia	2.5	14.8	27.0	23.8	15.3	16.6	100.0	6.4
Koinadugu	1.0	6.4	18.9	25.9	23.2	24.6	100.0	7.3
Port Loko	5.2	21.8	30.3	20.8	11.3	10.5	100.0	5.5
Tonkolili	2.3	13.8	29.0	25.9	17.4	11.6	100.0	6.1

Table 4.5 Distribution of households and mean household size by region and district (continued)

Region/district	Number of persons in the household							Mean household size
	1	2 - 3	4 - 5	6 - 7	8 - 9	10+	Total	
Southern	5.2	19.5	27.6	21.6	12.7	13.4	100.0	5.8
Bo	6.6	21.3	27.9	20.7	11.6	11.9	100.0	5.6
Bonthe	3.0	16.0	27.5	24.0	14.1	15.5	100.0	6.2
Moyamba	6.8	25.6	29.5	19.3	10.4	8.5	100.0	5.1
Pujehun	2.0	10.9	24.8	24.6	16.8	21.0	100.0	6.7
Western	12.4	29.0	27.5	15.9	7.7	7.4	100.0	4.7
Western Area Rural	9.5	27.4	29.1	17.6	8.7	7.6	100.0	4.9
Western Area Urban	13.6	29.7	26.9	15.2	7.4	7.3	100.0	4.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

4.5.2 Mean household size by characteristics of household head

The demographic and socio-economic characteristics of the household head are believed to have an influence on the size of the household. Table 4.6 shows that the mean household size for households headed by adolescents and youth (15–24 years) was as low as 3.5 persons, and the mean household size increases with increasing age of the household head. Households headed by persons aged 65 years or more were the biggest (6.4 persons). The non-Sierra Leoneans had relatively smaller households but because they constituted less than 1 per cent of the total number of households, they do not have any noticeable effect on the overall mean household size.

Household heads with secondary education had smaller mean household sizes than those with no education or with vocational and tertiary education. There is no clear relationship between level of education of the household head and the mean household size, or between economic activity status and mean household size. Table 4.6 also shows that the religion of the household head does not have a strong effect on the mean household size. However, it is noted that the mean household size of households headed by persons with 'no religion' was very low (3.8 persons).

Table 4.6 Households, household population and mean household size by selected characteristics of the household head

Characteristic	Households		Household population		Mean household size
	Number	Percentage	Number	Percentage	
Total	1,265,468	100.0	7,076,119	100.0	5.6
Age group					
15 - 24 years	77,972	6.2	275,472	3.9	3.5
25 - 64 years	1,039,832	82.2	5,854,204	82.7	5.6
65+ years	147,664	11.7	946,443	13.4	6.4
Highest educational level attained					
No Education	717,782	56.7	4,263,874	60.3	5.9
Basic School	246,229	19.5	1,289,531	18.2	5.2
SSS	167,969	13.3	788,318	11.1	4.7
Vocational/Technical/ Nursing/Teacher Training	58,085	4.6	309,148	4.4	5.3
University [1]	46,550	3.7	236,779	3.4	5.1
Other	28,853	2.3	188,469	2.7	6.5
Economic activity status					
Employed	1,051,315	83.1	6,008,738	84.9	5.7
Looking for work	38,766	3.1	180,181	2.5	4.6
Not in labour force	175,387	13.9	887,200	12.5	5.1
Religion					
Islam	969,917	76.6	5,506,388	77.8	5.7
Christian	284,508	22.5	1,510,004	21.3	5.3
Other	10,224	0.8	56,646	0.8	5.5
No Religion	819	0.1	3,081	0.0	3.8
Nationality					
Sierra Leonean	1,254,108	99.1	7,024,632	99.3	5.6
Other African	10,372	0.8	47,873	0.7	4.6
Non- African	988	0.1	3,614	0.1	3.7

[1] Includes first degree, post graduate and PhD

Source: Statistics Sierra Leone, 2015 Population and Housing Census

4.6 Household structure

The two major types of family ties are the nuclear and extended family systems. The nuclear family is made up of the head, spouse and children (whether biological or adopted). The extended family consists of the nuclear family and other relatives. Both nuclear and extended families may have non-relatives.

The 2015 Census collected information on the relationship of all household members to the household head. This information is used to construct the household structure in line with the United Nations Principles and Recommendations for Population and Housing Censuses. Four categories of household structure were identified namely single-person households, nuclear households, extended households and composite households.

Table 4.7 shows that the structure of the female-headed households is different from male-headed households. Most of the female-headed households were either 'extended with no spouse' (56.4 per cent) or 'nuclear with no spouse' (25.8 per cent). The two collectively constitute 82.2 per cent of the female-headed households. Conversely, most of the male- headed households are either 'extended with spouse' (36.1 per cent) or 'nuclear with spouse' (35.6 per cent). The two collectively constitute 71.7 per cent of the male-headed households. The rural areas generally had higher proportions of 'nuclear' households compared to urban areas.

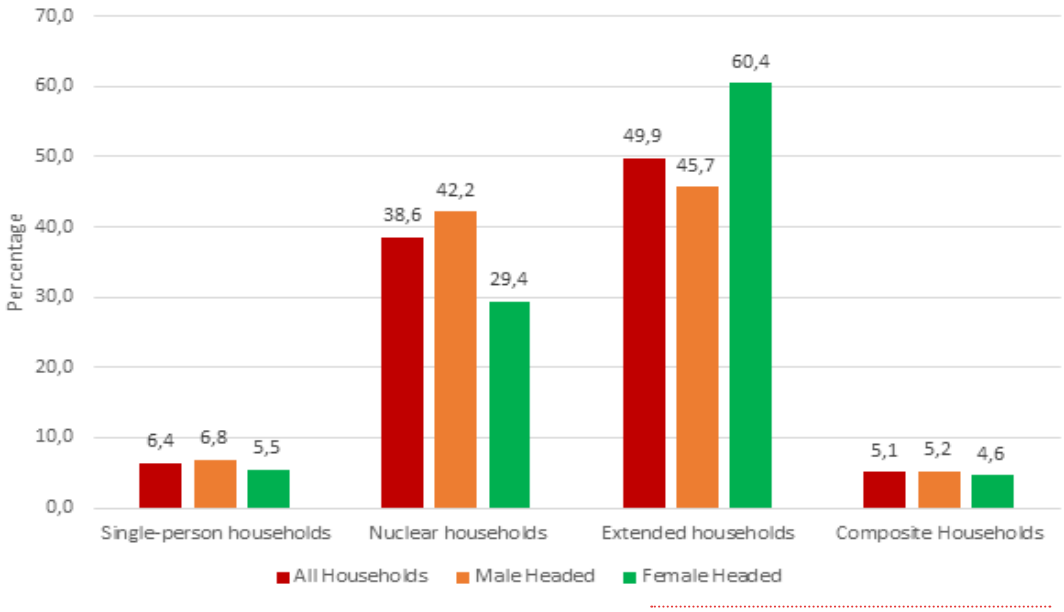
Table 4.7 Distribution of households by household structure, place of residence and sex of household head

Household structure	All places of residence			Rural			Urban		
	Total	Male headed	Female headed	Total	Male headed	Female headed	Total	Male headed	Female headed
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Head only	6.4	6.8	5.5	3.2	2.9	4.0	10.4	11.7	7.2
Head with only one spouse	3.2	4.3	0.5	2.5	3.3	0.4	4.0	5.5	0.5
Head with multiple spouse only	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Nuclear with no spouse	8.8	2.2	25.8	9.4	2.0	28.8	8.2	2.5	22.2
Nuclear with spouse(s)	26.5	35.6	3.2	30.6	40.9	3.5	21.5	29.1	2.8
Extended with no spouse	22.8	9.6	56.4	20.4	7.3	54.7	25.7	12.5	58.4
Extended with spouse(s)	27.1	36.1	4.0	29.0	38.5	4.1	24.7	33.1	3.9
Composite with spouse(s)	2.7	3.6	0.4	2.8	3.7	0.4	2.5	3.3	0.3
Composite with no spouse	2.4	1.7	4.3	1.9	1.1	4.1	3.0	2.4	4.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Figure 4.1 shows that in 2015, 38.6 per cent of the households in Sierra Leone were nuclear households while 49.9 per cent were extended households. The phenomenon of extended households was more common among female-headed households (60.4 per cent) than male headed households (45.7 per cent). About one in every 20 households (5.1 per cent) were composite households, with the proportions for the female-headed households being slightly lower than those for the male-headed households.

Figure 4.1 Distribution of the households by household structure



Source: Statistics Sierra Leone, 2015 Population and Housing Census

There was minimal variation in the general pattern of household structures by district or region. Table 4.8 shows that single-person households were more common in the Western Region (12.4 per cent) compared to the other regions. The Northern Region had the least share of single person households (3.9 per cent). The districts in the Western Region had large shares of the single-person households, while those of the other three regions had less than seven per cent of households as single-person households. Koinadugu district had the lowest share of single-person households (1.0 per cent) while Western Area Rural district had the highest share (13.6 per cent).

The extended households (with or without a spouse) were more common in the Northern and Southern regions (52.8 and 50.2 per cent respectively), while they constituted less than half of the households in Eastern and Western regions. All the districts of the Northern and Southern regions, except Moyamba district, had more than half of their households of an extended nature. The phenomenon of extended households was more common among the districts of Northern and Southern regions compared to the situation in Eastern and Western regions.

Table 4.8 Distribution of the households by region, district and household structure

Region/ district	Single-person households	Nuclear households	Extended households	Composite households	Total
Total	6.4	38.6	49.9	5.1	100.0
Eastern	4.5	43.5	47.5	4.5	100.0
Kailahun	2.0	44.3	49.6	4.1	100.0
Kenema	5.8	43.6	46.0	4.7	100.0
Kono	5.3	42.6	47.5	4.6	100.0
Northern	3.9	38.1	52.8	5.3	100.0
Bombali	5.8	37.5	51.6	5.1	100.0
Kambia	2.5	34.3	56.7	6.5	100.0
Koinadugu	1.0	38.6	54.6	5.8	100.0
Port Loko	5.2	39.8	50.5	4.5	100.0
Tonkolili	2.3	38.9	53.4	5.4	100.0
Southern	5.2	39.6	50.2	5.0	100.0
Bo	6.6	37.4	50.9	5.0	100.0
Bonthe	3.0	42.1	50.3	4.6	100.0
Moyamba	6.8	39.9	48.1	5.2	100.0
Pujehun	2.0	42.1	51.1	4.8	100.0
Western	12.4	34.2	47.9	5.4	100.0
Western Area Rural	9.5	37.8	47.2	5.6	100.0
Western Area Urban	13.6	32.8	48.2	5.4	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

4.7 Household composition

Individuals typically live in domestic groups or households whose members share characteristics, including the resources they can access, and acknowledge the same authority hierarchy. The characteristics of the household head are believed to have a strong bearing on the demographic, social, health and economic processes of the other household members. The 2015 Census collected information on the relationship of the household members to the household head. The household head was defined as 'the person whom the members of the household accept as their head'.

The household members are categorized into three broad groups: members of the family nucleus, other relatives (not members of the family nucleus) and those 'not related' to the household head. For the purposes of this report, only the family nucleus of the household head is considered, because it is the only one that can be identified from the data.

Table 4.9 shows that less than 2 per cent of the household population were not related to the household head. Most of the household members (71.9 per cent) were members of the family nucleus of the household head. The urban households had a slightly lower proportion (67.6 per cent) of persons within the family nucleus of the household head, compared to the rural households (74.8 per cent). The sons and daughters of the household head constituted 40.8 per cent of the household population. The dominance of the sons and daughters was observed irrespective of sex or place of residence. However, it was less pronounced in the urban areas (35.5 per cent) compared to the rural areas (44.4 per cent).

More than one quarter (26.5 per cent) of the household population was 'other relatives'. This points to the sustenance of social support through the extended family system, as already shown in Section 4.6. Among the 'other relatives', persons in the unspecified category (other relationship) were most dominant (10.2 per cent). The 'sisters/brothers' of the household head comprised 6.5 per cent of the household population while the 'nephew/niece' of the household head constituted 4.9 per cent of the household population. The households in the urban areas had a slightly higher proportion of 'other relatives' (30.5 per cent) compared to those in the rural areas (23.7 per cent).

Table 4.9 Distribution of the household population by relationship to household head, place of residence and sex

Household structure	All places of residence			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Member of the family nucleus	71.9	71.2	72.5	74.8	74.3	75.2	67.6	66.6	68.6
Head	17.9	26.1	9.9	16.7	24.6	9.0	19.6	28.3	11.1
Spouse	11.6	0.8	22.0	12.1	0.8	23.0	10.8	0.9	20.5
Son/daughter	40.8	42.6	39.0	44.4	47.3	41.7	35.5	35.8	35.2
Step son/ daughter	1.6	1.6	1.7	1.6	1.6	1.6	1.7	1.6	1.8
Other relatives	26.5	26.6	26.4	23.7	23.7	23.8	30.5	30.8	30.1
Sister/brother	6.5	7.6	5.5	5.9	6.8	5.0	7.5	8.8	6.2
Nephew/niece	4.9	5.1	4.6	3.8	4.1	3.5	6.4	6.5	6.2
In-law	1.8	1.2	2.4	1.5	0.9	2.1	2.2	1.5	2.9
Uncle/aunt	1.2	1.2	1.1	0.9	1.0	0.9	1.5	1.6	1.5
Parent	0.9	0.2	1.5	1.1	0.3	1.8	0.6	0.2	1.0
Grand child	0.8	0.9	0.8	0.8	0.8	0.7	1.0	1.0	1.0
Grand parent	0.2	0.1	0.3	0.2	0.1	0.3	0.1	0.0	0.2
Other relationship	10.2	10.3	10.1	9.5	9.7	9.4	11.1	11.2	11.0
Not related	1.7	2.2	1.1	1.5	2.0	1.0	2.0	2.6	1.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 4.10 shows that the composition of the households in Eastern, Northern and Southern regions is similar to the country as a whole. The Western Region had a slightly different household composition with higher proportions of household heads (21.5 per cent) and 'other relatives' (30.2 per cent). The wide variation in household composition between the Western Region and the other regions reflects the effects of the high urbanization levels.

In general, the composition of the population of the households among districts is quite similar. However, the composition of the household population in Koinadugu and Pujehun districts was different from the rest of the districts, with very low proportions of household heads (13.7 and 14.9 per cent respectively) and spouses (9.8 and 10.5 per cent respectively) and high proportions of 'son/daughter' (51.0 and 48.4 per cent respectively). This is not surprising given that these two districts had high proportions of extended households.

Table 4.10 Distribution of household population by region, district and relationship to household head

Region/district	Relationship to household head					
	Head	Spouse	Child	Other relative	Not related	Total household population
Total	17.9	11.6	42.4	26.5	1.7	100.0
Eastern	17.1	11.7	46.3	23.4	1.5	100.0
Kailahun	15.9	10.8	49.1	22.9	1.3	100.0
Kenema	18.3	12.5	43.3	24.1	1.7	100.0
Kono	17.0	11.6	47.0	22.9	1.5	100.0
Northern	16.6	11.6	44.0	26.3	1.5	100.0
Bombali	17.5	11.4	42.9	26.7	1.6	100.0
Kambia	15.6	12.3	41.9	28.5	1.7	100.0
Koinadugu	13.7	9.8	51.0	24.0	1.4	100.0
Port Loko	18.2	12.7	40.9	26.9	1.3	100.0
Tonkolili	16.3	11.5	44.7	25.8	1.6	100.0
Southern	17.3	11.5	43.1	26.5	1.6	100.0
Bo	17.9	11.4	40.7	28.4	1.6	100.0
Bonthe	16.2	11.9	45.9	24.6	1.4	100.0
Moyamba	19.5	12.8	39.7	26.0	2.0	100.0
Pujehun	14.9	10.5	48.4	24.8	1.5	100.0
Western	21.5	11.4	34.8	30.2	2.1	100.0
Western Area Rural	20.6	12.2	37.2	27.8	2.1	100.0
Western Area Urban	21.9	11.0	33.8	31.2	2.1	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 4.11 shows the distribution of the household population by age and relationship to the household head. Most of the household heads (61.8 per cent) were aged 25-49 years while the equivalent share for the spouses was 69.6 per cent. Conversely, most of the children (91 per cent) and 'other relatives' (73.6 per cent) were aged less than 25 years.

The median age for the household heads was 42.4 years, which was 9.5 years older than that of the spouses (32.9 years). The children and the 'other relatives' were much younger than the heads or spouses with median ages of 10.7 and 16.2 years respectively.

Table 4.11 Distribution of household population by age group and relationship to household head

	Relationship to household head					
Age group	Total household population	Household head	Spouse	Child	Other relative	Not related
Total	100.0	100.0	100.0	100.0	100.0	100.0
0 - 14	41.0	0.0	0.2	66.4	46.1	29.4
0	2.5	0.0	0.0	4.1	2.4	3.9
1 - 4	10.8	0.0	0.0	18.0	11.6	4.4
5 - 9	15.7	0.0	0.0	25.3	17.9	10.1
10 - 14	12.0	0.0	0.2	18.9	14.1	11.0
15 - 24	21.6	6.2	19.6	24.6	27.5	32.0
15 - 19	12.3	1.2	4.9	16.4	16.2	16.0
20 - 24	9.3	5.0	14.7	8.2	11.3	16.0
25 - 49	28.2	61.8	69.6	8.7	18.4	33.3
25 - 29	8.6	11.0	20.7	4.6	7.6	13.3
30 - 34	6.1	11.7	16.3	2.2	4.1	7.9
35 - 39	5.9	15.1	16.1	1.1	3.0	5.7
40 - 44	4.2	12.4	9.7	0.5	2.2	4.0
45 - 49	3.4	11.6	6.7	0.2	1.6	2.5
50 - 64	5.8	20.4	8.5	0.2	3.8	3.6
50 - 54	2.6	9.1	4.4	0.1	1.5	1.8
55 - 59	1.6	5.7	2.1	0.0	1.0	0.9
60 - 64	1.6	5.5	1.9	0.0	1.4	0.9

Table 4.11 Distribution of household population by age group and relationship to household head (continued)

	Relationship to household head					
Age group	Total household population	Household head	Spouse	Child	Other relative	Not related
65 and over	3.5	11.7	2.1	0.0	4.2	1.6
65 - 69	1.0	3.8	0.9	0.0	0.9	0.5
70 - 74	0.9	3.1	0.6	0.0	1.1	0.5
75 - 79	0.6	2.0	0.3	0.0	0.7	0.2
80+	1.0	2.8	0.3	0.0	1.5	0.4
Median age	18.7	42.4	32.9	10.7	16.2	21.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

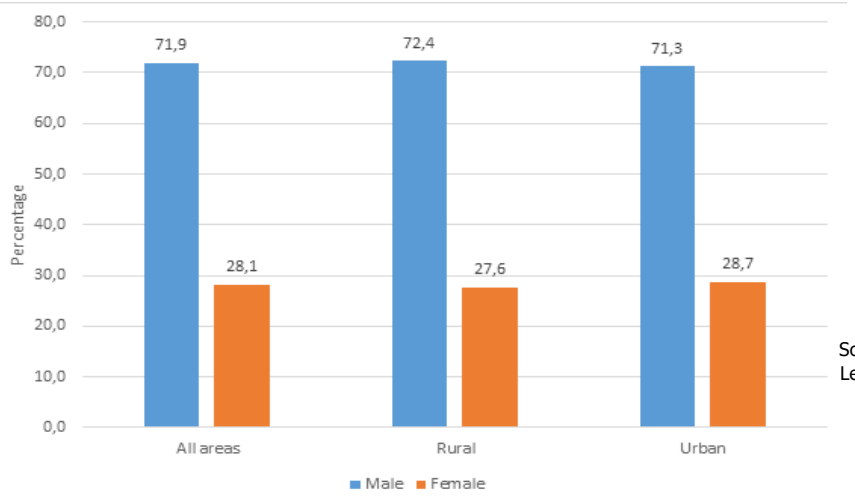
4.8 Household heads

It is generally believed that the characteristics of the household head have a strong influence on the behaviour of the entire household, as well as the way household resources are utilized and disbursed within the household, and the way households are networked for exchange of resources with other households. An analysis of the characteristics of household heads is crucial to understanding the behaviour of households and, subsequently, the entire population.

4.8.1 Household heads by sex and place of residence

The distribution of the household heads is presented in Figure 4.2. It is seen that household headship is male dominated with 71.9 per cent of the household heads being males as compared to 28.1 per cent females. The male domination was observed for both rural and urban areas.

Figure 4.2 Distribution of households by place of residence and sex of household head



Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 4.12 shows that there were very few youths (15–24 years) who were household heads (6.2 per cent), while the older persons (65 years and above) constituted 12 per cent of the household heads. Thus, the majority (82.2 per cent) of household heads were in the age range of 25-64 years. The age distribution of the female household heads was slightly younger than that for male household heads. The median age for the female household heads was 44.1 years compared to 41.9 years for the male-headed households.

Household headship was highly male dominated. The overall sex ratio for the household heads was 256 males per 100 females. The sex ratio was higher for the rural household heads (262) compared to the urban household heads (248). The sex ratio was highest for the household heads aged 25–64 years (277).

Table 4.12 Distribution of households, sex ratio and headship rates by place of residence and age of the household head

Characteristic	Household head			Sex ratio	Headship rates		
	Total	Male	Female		Total	Male	Female
Total	100.0	100.0	100.0	255.5	17.9	26.1	9.9
Place of residence							
Rural	55.1	55.5	54.2	261.7	16.7	24.6	9.0
Urban	44.9	44.5	45.8	248.3	19.6	28.3	11.1
Age group							
15 - 24 years	6.2	5.6	7.6	188.7	5.1	6.9	3.4
25 - 64 years	82.2	84.0	77.5	277.0	43.2	65.1	22.4
65+ years	11.7	10.4	14.9	177.8	60.0	81.0	41.0
Median age	42.4	41.9	44.1	***	***	***	***

*** Not applicable

Source: Statistics Sierra Leone, 2015 Population and Housing Census

4.8.2 Household headship

The headship rate is the proportion of household heads relative to the household population in each sub-group. It is computed by dividing the number of persons of a population sub-group who are household heads by the total household population of the same population sub-group. For ease of reporting, the rates have been multiplied by 100. The headship rate gives the chances for a person of a given population sub-group to become a household head.

Table 4.13 shows that more than half (56.7 per cent) of the household heads had never had any education and more than half of the household heads (55.5 per cent) were not literate. Household heads with vocational, tertiary or university education constituted 8.3 per cent of the total. Persons with vocational, tertiary or university education were more likely to become household heads, with headship rates higher than 40 per cent compared to less than 25 per cent for those with no education or only basic education.

Table 4.13 Distribution of households and headship rates by literacy status, highest educational attainment of household head

Characteristic	Household head			Sex ratio	Headship rates		
	Total	Male	Female		Total	Male	Female
Literacy status							
Not literate	55.5	49.1	71.6	175.3	29.0	45.3	17.8
Literate - in a local language	3.8	3.9	3.6	279.6	26.2	38.7	13.7
Literate – not in local language	40.3	46.6	24.3	489.1	21.2	31.0	8.4
Highest educational level attained							
No education	56.7	51.6	69.8	188.9	24.5	36.4	15.1
Basic school	19.5	20.6	16.6	316.9	9.1	14.0	4.3
SSS	13.3	15.4	7.8	504.3	25.2	34.4	10.8
Vocational/ Technical/ Nursing/ Teacher Training	4.6	5.0	3.5	364.9	42.8	56.5	22.7
University [1]	3.7	4.4	1.8	617.5	47.3	58.4	21.7
Other	2.3	3.0	0.5	1,697.7	47.4	53.2	16.7

[1] Includes Higher (first degree) and Tertiary (Post-graduate) & PhD

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 4.14 shows that about two thirds (66.8 per cent) of the household heads were in self-employment, 12.7 per cent were employees and 16.7 per cent were not working. The employed persons were more likely to be household heads as shown by a hardship rate of 58.3 per cent, while those 'not working' or 'other working persons' were less likely to be household heads.

The headship rates for 'not working' and 'other working persons' were 8.0 and 22.5 per cent respectively. The low skill jobs such as elementary occupations, agricultural workers and service workers had a higher share of female household heads compared to male heads. The same categories had low headships rates (less than 40 per cent) compared to the other occupations whose headship rate were 45 per cent or higher. This means that persons doing low-skill jobs were less likely to become household heads.

Table 4.14 Distribution of households and headship rates by employment characteristics of household head

Characteristic	Household head			Sex ratio	Headship rates		
	Total	Male	Female		Total	Male	Female
Economic activity status							
Employee	12.7	15.2	6.3	620.0	58.3	68.9	29.8
Self-employment	66.8	67.7	64.4	269.0	37.4	57.0	19.4
Other working persons	3.6	3.7	3.3	282.8	22.5	32.6	12.0
Looking for work	3.1	3.5	2.0	441.6	32.7	42.6	16.2
Not working	13.6	9.7	23.6	104.6	8.0	8.9	7.2
Occupation							
Legislators, senior officials and managers	1.4	1.6	0.9	551.8	52.7	67.8	23.7
Professionals	6.8	7.5	4.7	474.0	57.2	69.9	30.7
Technicians and associate professionals	3.0	3.4	1.7	607.1	52.7	63.6	25.9
Clerks	0.9	0.9	0.7	378.1	50.0	63.6	27.6
Service workers and shop and market sales workers	16.4	12.7	27.7	137.4	35.8	59.0	23.2
Agricultural and fishery workers	54.2	53.8	55.6	289.8	34.5	53.7	17.0
Craft and related trade workers	9.3	11.2	3.8	871.6	45.2	53.0	19.9
Plant and machine operators and assemblers	4.3	5.6	0.3	5,362.7	56.8	58.7	20.4
Elementary occupations	2.7	2.2	4.2	155.1	35.0	55.5	22.3
Other occupation	0.9	1.1	0.4	888.5	61.4	74.9	23.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 4.15 shows that most household heads (72.6 per cent) were 'currently married' persons. Among the female heads, the share of the currently married females was lower (50.1 per cent) than that for males (81.5 per cent). The 'never married' persons, especially the females, were less likely to be household heads. The headship rate was 4.3 for 'never married' females and 9.7 for the 'never married' males. The headship rates for the currently married and formerly married (widowed, divorced or separated) persons were quite high at 42.5 per cent for the currently married persons and 51.1 per cent for the 'formerly married' persons. Among the 'formerly married' persons, the females had a marginally higher chance of being household heads compared to the males, while the reverse is true among the currently married persons.

There were no major differentials in household headship by religion, except for persons with 'no religion' whose headship rate was 4.1 per cent, while the headship rates for persons of the other religious groups were between 18.4 for the Christians and 17.6 for those of the 'other' religion. The non-Sierra Leoneans were more likely to be household heads with headship rates of 29.9 per cent for the 'other Africans' and 31.2 per cent for the 'non-Africans'.

Table 4.15 Distribution of households and headship rates by selected socio-economic characteristics of household head, Sierra Leone, 2015

Characteristic	Household head			Sex ratio	Headship rates		
	Total	Male	Female		Total	Male	Female
Marital status							
Never married (including engaged)	14.5	14.8	13.6	279.5	7.3	9.7	4.3
Cohabiting	0.4	0.2	0.9	68.0	17.9	17.3	18.3
Currently married	72.6	81.5	50.1	415.8	42.5	76.1	15.0
Formerly married	12.4	3.4	35.4	24.8	51.1	47.4	52.0
Not working	13.6	9.7	23.6	104.6	8.0	8.9	7.2
Religion							
Christian	22.5	21.7	24.5	225.7	18.4	26.5	10.9
Islam	76.6	77.5	74.6	265.4	17.8	26.1	9.6
Other religion	0.8	0.8	0.8	245.8	17.6	25.6	10.0
No religion	0.1	0.1	0.1	331.1	4.1	6.1	2.0
Nationality							
Sierra Leonean	99.1	99.0	99.5	254.2	17.8	26.0	9.9
Other African	0.8	0.9	0.5	487.6	29.9	43.9	11.7
Non- African	0.1	0.1	0.0	768.2	31.2	38.3	12.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Generally, household headship was highly male dominated. The overall sex ratio for the household heads was 256 males per 100 females. Tables 4.10, 4.11, 4.12 and 4.13 show that the sex ratios of the different sub-populations were above 150 males per 100 females. The few exceptions were household heads who were cohabiting, formerly married (widowed, divorced or separated), persons 'not working' or persons employed as service workers. The headship rates for males were more than twice as high as those for females, except for persons formerly married, those cohabiting and those 'not working'.

4.9 Summary, Conclusion and Recommendations

4.9.1 Summary

The total number of households in Sierra Leone increased from 485,711 in 1985 to 1.3 million in 2015. All districts and regions experienced an increase in the number of households between 2004 and 2015.

Most of the population of Sierra Leone (99.8 per cent) was enumerated in households. The proportion of the one-person households fell from 11 per cent in 1985 to 6.4 per cent in 2015. Sierra Leone has large households with 11.6 per cent of the households having 10 or more members in 2015. However, the mean household size has consistently declined from 6.6 persons in 1985 to 5.6 persons in 2015. The districts of the Western Region had household sizes much smaller than the national average, while those for the other three regions were quite close to the national average. Religion, employment and level of education showed no effect on the mean household size.

Nearly half of the households were of the extended household structure while 38.6 per cent were nuclear households. The population of Sierra Leone predominantly lives in a family set-up. Most of the household members were relatives of the household head. Nearly two-thirds (64 per cent) of the household members were members of the head's family nucleus that is their spouse or children. The other relatives constituted only 26.5 per cent. The share of the 'other relatives' was higher in urban areas (30.5 per cent) compared to the rural areas (23.7 per cent). Household headship was highly male dominated with 72 per cent of the households being headed by males. Where females were household heads, the household was more likely to be without a spouse.

4.9.2 Conclusion

Though Sierra Leone has large households, the average household size has consistently shown a decrease in size to 5.6 in 2015. Headship of households was highly male dominated with nearly three-quarters of the household heads being males. The extended family is still valued, especially in the urban areas.

4.9.3 Recommendations

A population census is not the best way to study the household and family structure. A detailed understanding of the complexities of household and family structure and its impact on socio-economic development should be addressed through a household based sample survey, which can identify the complicated interrelationships between household members. Such a survey could be undertaken by Statistics Sierra Leone or a research institution within the country.

APPENDIX

Table A.4.1 Classification of households [1]

Households should be classified by type according to the number of family nuclei they contain and the relationship, if any, between the family nuclei and the other members of the household. The relationship should be through blood, adoption or marriage, to whatever degree is considered pertinent by the country. Given the complexity of this item, it is important that information on relationship to the household reference person be properly processed. The types of household to be distinguished could be:

a)Single-person household.

b)Nuclear household, defined as a household consisting entirely of a single family nucleus. It may be classified into:

(i) Married-couple family:
  a.With children;
  b.Without children.
(ii) Partner in consensual union (cohabiting partner):
  a. With children;
  b. Without children.
(iii) Father with children.
(vi) Mother with children.

c) Extended household, defined as a household consisting of any one of the following [2]:

(i) A single family nucleus and other persons related to the nucleus, for example, a father with child/children and other relative(s) or a married couple with other relative(s) only;
(ii) Two or more family nuclei related to each other without any other persons, for example, two or more married couples with children only;
(iii) Two or more family nuclei related to each other plus other persons related to at least one of the nuclei, for example, two or more married couples with other relative(s) only;
(iv) Two or more persons related to each other, none of whom constitute a family nucleus;

d) Composite household, defined as a household consisting of any of the following:

(i) A single family nucleus plus other persons, some of whom are related to the nucleus and some of whom are not, for example, mother with a child/children and other relatives and non-relatives;
(ii) A single family nucleus plus other persons, none of whom is related to the nucleus, for example, father with children and non-relatives;
(iii) Two or more family nuclei related to each other plus other persons, some of whom are related to at least one of the nuclei and some of whom are not related to any of the nuclei, for example, two or more couples with other relatives and non-relatives only;
(iv) Two or more family nuclei related to each other plus other persons, none of whom is related to any of the nuclei, for example, two or more married couples one or more of which with children and non-relatives;
(v) Two or more family nuclei not related to each other, with or without any other persons;
(vi) Two or more persons related to each other but none of whom constitute a family nucleus, plus other unrelated persons;
(vii) Non-related persons only.

e) Other/unknown.

1 Extracted from the Principles and Recommendations for Population and Housing Censuses (Revision 2)
2 The subdivisions in this category should be modified to suit national circumstances.

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CHAPTER 5: FERTILITY

5.1 Introduction

Fertility as a component of demographic change is important in understanding population trends. Fertility indicators are also important for monitoring population policies and programmes. Although total fertility rates have been declining globally, most countries in sub-Saharan Africa, including Sierra Leone, still have relatively high fertility and the rate of fertility decline has been slower compared to other developing countries. Some of the reasons for persisting high fertility include early childbearing, the desire to have large families, and little or no contraception provision.

There are some government initiatives aimed at addressing the issue of high fertility in Sierra Leone. Since 2013, there has been a National Strategy for the Reduction of Teenage Pregnancy specifically aimed at reducing teenage pregnancies. There is also a National Population Policy that was launched in 2009. One of the goals of the policy is to achieve low birth and death rates, and consequently low population growth, through the spread of voluntary family planning and small family norms to achieve national economic targets.

The 2013 Sierra Leone Demographic and Health Survey (SLDHS) found that use of contraceptives remains low in Sierra Leone with only 15.6 per cent of married women using modern contraceptives. Furthermore, women who have not had a proper education have been shown to be less likely to use contraception. This chapter presents the pattern, levels and differentials of fertility.

5.2 Definition of measures of fertility

Fertility refers to the frequency of occurrence of live births among women in a population. The crude birth rate (CBR) is the number of live births per thousand mid-year population during a specified period. The number of live births per thousand women of reproductive age (15-49 years) is known as the general fertility rate (GFR).

Age specific fertility rate (ASFR) is the number of live births per thousand women of a specific age group. The ASFRs show the age pattern of fertility and are used to calculate total fertility rate (TFR) which is the number of children that a woman would have by the end of her childbearing period if she were to experience the currently observed ASFRs.

Another measure of fertility is the child-woman ratio also known as the fertility ratio which is the number of children aged below 5 years per 1,000 women of childbearing age. However, under-enumeration or over-enumeration affects the ratio, such that it is important to assume these were constant if data are compared at different time periods.

Taking female births only into consideration, gross reproduction rate (GRR) and net reproduction rate (NRR) can be calculated. GRR is the average number of female births that a woman would give birth to by the time she reached the end of her reproduction, if she experienced ASFRs prevailing in that year. NRR refers to the average number of female births born to women aged 15-49, that would survive to the end of their reproductive period after experiencing the prevailing fertility and mortality levels.

Completed family size, also known as the mean parity, is the number of children ever born to women who have completed their reproduction (those aged 45-49). Parity progression ratio is the proportion of women of a specific parity who progress to the next parity. Based on ASFR schedule, the mean age at childbearing can be calculated. This indicator is the average age of mothers at the birth of their children, if women were subject throughout their lives to the ASFRs observed in each year.

5.3 Sources and quality of fertility data

Sierra Leone, like most developing countries, does not have a complete registration system for births and deaths. As such, the important sources of information on fertility in the country is obtained from censuses and surveys. Previous fertility indicators were obtained from surveys such as 2008 and 2010 Demographic and Health Surveys (DHS), 2010 Multiple Indicator Cluster Survey (MICS) and the 2004 Census.

The 2015 Census collected data on current and completed fertility of women aged 10-54 years. Specifically, the information collected was whether the woman had ever given birth; how many children were born alive during her lifetime; and how many children were born in the 12 months before the census.

The question on children ever born provides required information for estimating lifetime fertility of women. The estimates of completed family size were derived using data from this question. The information collected using the question on births in the 12 months prior to the census is useful in estimating current fertility. Data collected using this question were used in the computation of ASFRs, TFRs, GRRs and NRRs.

The fertility information collected through censuses is known to be inaccurate due to under-reporting of births at the time of data collection, resulting in lower estimates than the actual levels. As a result, indirect methods are used to estimate the fertility levels.

To assess data quality of current fertility from censuses, the checks can include comparison of the total reported births with total expected births and assessment of the plausibility of the distribution of ASFRs calculated directly from the data.

The census data show that 87,302 births were reported for the 12 months before the census among 1, 831,953 women aged 15-49 years. The results show that the reported total births in 2015 were much lower than in the 2004 Census. The data also show much lower ASFRs, compared to those from the 2013 DHS. However, the pattern of fertility is similar. As such, indirect methods were used for fertility estimation.

5.4 Methods of analysis

The analysis of fertility in this chapter involved calculation of rates, ratios and proportions. Also included were indirect fertility estimation using the Trussell variant of the Brass P/F ratio method and Brass relational Gompertz model.

The Brass P/F ratio technique assumes that the level of completeness of fertility is the same for all age groups of women. The method also assumes that the reporting of the average number of children ever born per woman is complete, at least up to ages 30 or 35 years, and that there is no age misreporting of women in the childbearing years. Lastly, the method assumes that the pattern and level of fertility have not changed during the 10 to 15 years prior to the census or survey.

The P/F ratios themselves serve as a useful tool to analyze the quality of data and determine a possible recent trend in fertility. For instance, typical results may show similar P/F ratios for the age groups 20-24, 25-29, and 30-34 years, with ratios becoming smaller for the older ages. This could indicate that fertility has been constant in the past as assumed in the technique; that any underreporting of births in the last year occurred equally at all ages of women; and that any underreporting of children ever born occurred only with respect to women aged 35 years and over. However, older women tend to under-report their lifetime fertility. Secondly, women of all ages tend to under-report recent births.

The Brass relational Gompertz model is an improved method over the P/F ratio method and it does not assume that fertility has been constant in the past. The estimates pertaining to ages 20-24 years and 25-29 years are mostly taken as the actual levels of the TFR.

Population Analysis System (PASEX) spread sheets developed by the United States Bureau of the Census (International Programs Centre) were used for estimation of fertility. For TFR calculation using Gompertz relational model, the FE_Relational Gompertz spreadsheet developed by T. Moultrie was used.

5.5 Fertility levels and pattern

The reported 87,302 births were adjusted to 328,433 births, based on adjusted ASFRs presented later in this chapter. Table 5.1 shows adjusted CBR and GFR for 2004 and 2015. The 2015 census data show that adjusted CBR was 46.4 births per 1,000 population. The adjusted general fertility rate was estimated at 179.3 per 1,000 women. The rates for 2015 were lower than 2004, whose GFR was 192.0 and CBR was 48.2.

There is variation by place of residence with both CBR and GFR being higher in rural than urban areas as shown in Table 5.1. In 2015, CBR in rural areas was 49.2 per 1,000 population compared to 41.0 per 1,000 population in urban areas. GFR was 199.4 per 1,000 women in rural areas compared to 148.4 per 1,000 women in urban areas. The reported child-woman ratio for Sierra Leone was estimated at 512 children aged under-five per 1,000 women of childbearing age. This was also lower than the 2004 estimate of 603.

Table 5.1 Adjusted crude birth rates and general fertility rates by place of residence, 2004 and 2015

		Total	Urban	Rural
2004	CBR	48.2	-	-
	GFR	192.0	-	-
2015	CBR	46.4	41.0	49.2
	GFR	179.3	148.5	199.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 5.2 shows the estimated TFR from the Brass P/F ratio method and Gompertz relational model for comparison. The estimate from the P/F ratio method was slightly higher at 5.8 compared to 5.6 from the Gompertz method. The TFR presented in this chapter has been adjusted using the Gompertz relational model as the values are closer to the TFR published for Sierra Leone in recent years. As such, according to the 2015 census results, the adjusted TFR is 5.6.

As a measure of completed fertility, the average number of children ever born to women age 45-49 tends to exhibit much more stability than ASFRs from year to year. Also known as the completed family size, the average number of children ever born to women aged 45-49 years was 5.4. which was lower than the 2004 estimate of 6.0.

Table 5.2 Comparison of TFR estimates from Brass P/F Ratio method (Trussell variant) and Relational Gompertz model

Age group	Relational Gompertz model	Brass P/F ratio (Trussell variant)
15 – 19	0.1230	0.1013
20 – 24	0.2451	0.2335
25 – 29	0.2548	0.2704
30 – 34	0.2222	0.2348
35 – 39	0.1709	0.1825
40 – 44	0.0859	0.0871
45 – 49	0.0128	0.0518
TFR	5.6	5.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

5.6 Age pattern of fertility

The pattern of reported fertility in the 12 months before the census shows a sharp fertility increase from age 15-19 years to 20-24 years, suggesting rapid childbearing at younger ages (Table 5.3). Fertility peaked among women aged 25-29 years after which it started to decline.

Table 5.3 Reported age specific fertility rates, 1974-2015

Age group	Year of census			
	1974	1985	2004	2015
15 – 19	0.186	0.1255	0.065	0.0232
20 – 24	0.26	0.2039	0.1405	0.0602
25 – 29	0.246	0.1981	0.1492	0.0728
30 – 34	0.184	0.1578	0.1308	0.0645
35 – 39	0.1438	0.1223	0.1074	0.0511
40 – 44	0.071	0.0625	0.0547	0.0259
45 – 49	0.0472	0.0389	0.0342	0.0157
TFR	5.7	4.5	3.4	1.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The reported and adjusted ASFRs and TFRs from 1985 to 2015 are presented in Table 5.4. The adjusted ASFR for women aged 15-19 years was 123 births per 1,000 and it rose to 245 per 1,000 for women aged 20-24 years. Fertility peaked later among women aged 25- 29 years after which it started to decline.

The age pattern of fertility is similar to the 2004 census results, but there is a decline in ASFR at each age group. The highest fertility decline was observed for women aged 45-49 where ASFR had declined by 78 per cent.

Of all the births that were reported among women aged 45-49 years in the year preceding the census, 64 per cent occurred among women aged 15-29, which was about 62 per cent of the women. The data further show that 12 per cent of the total births were from women aged 1519 and the proportion of these teenagers to women of childbearing age was 24 per cent.

Table 5.4 Reported and adjusted age specific fertility rates and total fertility rates, 1985-2015

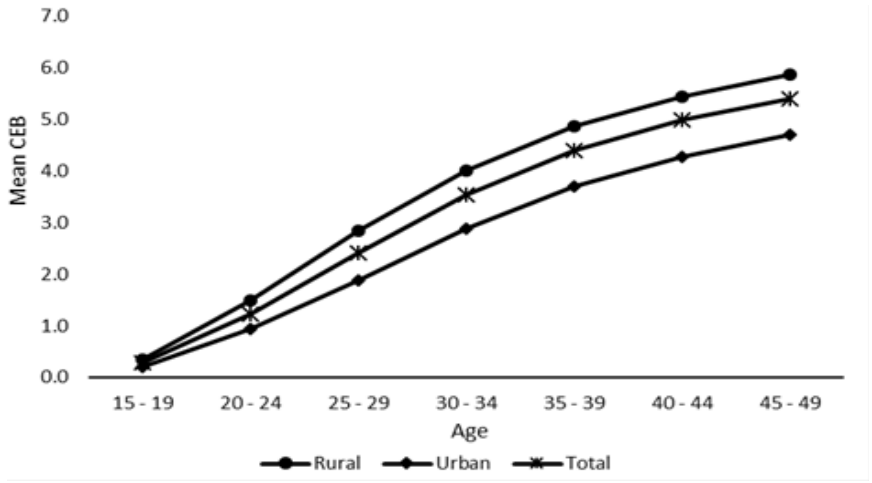
Age group	Year of census					
	1985		2004		2015	
	Observed ASFR	Adjusted ASFR	Observed ASFR	Adjusted ASFR	Observed ASFR	Adjusted ASFR
15 – 19	0.1255	0.2	0.065	0.1364	0.0232	0.123
20 – 24	0.2039	0.28	0.1405	0.2581	0.0602	0.2451
25 – 29	0.1981	0.27	0.1492	0.2665	0.0728	0.2548
30 – 34	0.1578	0.21	0.1308	0.2307	0.0645	0.2222
35 – 39	0.1223	0.16	0.1074	0.1857	0.0511	0.1709
40 – 44	0.0625	0.08	0.0547	0.0891	0.0259	0.0859
45 – 49	0.0389	0.05	0.0342	0.0545	0.0157	0.0128
Reported TFR	4.5	6.3	3.4	6.1	1.6	5.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Age specific parity is the average number of children per woman of a specified age group. Figure 5.1 shows the parity of women by age and place of residence. The parity of women aged 15-19 years was 0.3 and rose to 2.4 for women aged 25-29 years. The average number of children ever born for women aged 35-39 years was 4.4.

The parity of women in rural areas was higher than that of women in urban areas. The gap in parity widens as women get older. For example, the parity for women aged 15-19 in urban areas was 0.2 compared to 0.4 in rural areas. For older women aged 45-49 years, the parity for women in urban areas was 4.7 compared to 5.9 in rural areas.

Figure 5.1 Mean children ever born alive among women aged 15-49 years by place of residence, 2015



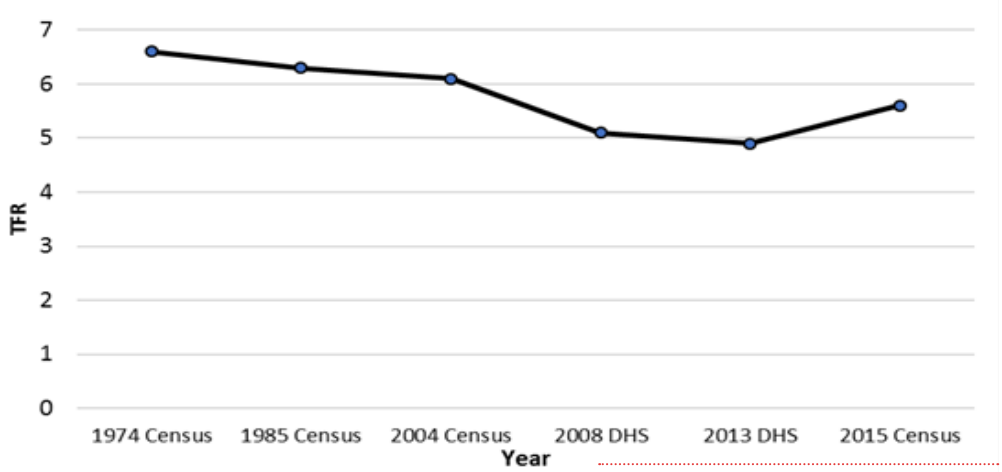
Source: Statistics Sierra Leone, 2015 Population and Housing Census

5.7 Fertility trends, 1974-2015

The trends in TFRs from 1974 to 2015 are presented in Figure 5.2. In general, there has been a fertility decline, as shown by the downward trend of TFRs. The DHS estimates of TFR are much lower than the census estimates but they also show a decline in fertility. The TFRs for 2008 and 2013 DHS were 5.1 and 4.9 respectively. The rate of fertility decline was faster between the 2004 Census and the 2008 DHS and the fertility increase between the 2013 DHS and 2015 census is unlikely.

It is possible that data quality may have been an issue with the two surveys, as the fertility information was collected through a very detailed birth history of the woman. In the past 40 years, fertility had declined from 6.5 in 1974 to 5.6 in 2015, showing that the TFR had declined by an average of one child during this period.

Figure 5.2 Trends in total fertility rate, 1974-2015



Source: Statistics Sierra Leone, 2015 Population and Housing Census

5.8 Fertility differentials

An analysis of fertility differentials shows variation in fertility for different subgroups of women. Table 5.5 shows ASFRs and TFRs by selected characteristics of women, which include place of residence, region, marital status and education level.

5.8.1 Place of residence

The results show that fertility was higher in rural areas with TFR of 6.2 compared to 4.6 in urban areas. Fertility among urban women was lower at all ages compared to that of rural women. The age pattern of fertility between urban and rural areas was similar, as the fertility peaked among women aged 25-29 years.

The largest variation in ASFRs between the urban and rural areas was among women aged 20- 29 years. The TFR in the urban areas was lower at 4.6 compared to 6.2 in rural areas, suggesting that in urban areas, women have one child less by the time they reach the end of their reproductive life than women in rural areas.

5.8.2 Region

Fertility was highest for the Northern and Southern regions at 6.0 respectively and lowest in the Western Region at 4.1. The Western Region had much lower ASFRs for all age groups. The age pattern of fertility also shows that the fertility rate of adolescents (15-19 years) in the Western Region was lower than in the other regions. For example, adolescent fertility in the Western Region was 36 per cent lower than in the Southern Region.

The Western Region had a total fertility of 4.1 compared to 6.0 for both Northern and Southern regions. The 2004 Census also showed a similar regional TFR pattern, with the TFR being highest in the Southern Region (6.9) and lowest in the Western Region (4.2).

5.8.3 Marital status

Fertility was higher among married women and widows, 5.5 and 5.4 respectively. Among women who have never been married, the TFR was 3.6. The fertility pattern by age shows that ASFRs for widows exceeded those of women of other marital categories at ages 20-34 years, while ASFRs for women who have never been married exceeded those of the other women at older ages (40-49 years).

Younger women who have ever been married had high fertility. ASFR for married women aged 15-19 years was 233 per 1,000 women; 200 per 1,000 women for divorced women; and 218 per 1,000 women for widows, compared to 58 per 1,000 among women who have never been married.

It is interesting to note that the age pattern of fertility for divorced women shows that fertility declined steadily from young women aged 15-19 years, while ASFR for married and widows declined from age 20-24. Married women and widows had TFRs of 5.5 and 5.4 respectively while women who have never been married had a TFR of 3.6.

5.8.4 Educational attainment

The results in Table 5.5 show that there is an inverse relationship between education and fertility. Fertility was lowest among women with tertiary education, with a TFR of 3.0 children per woman. The TFR among women with secondary education was 3.9 while women who have never attended school had a TFR of 6.2. Women with only primary education had a TFR of 5.5.

Completed family size also varied by education of the woman. Women with secondary education or higher had the smallest completed family size of 3.9. Women who have never attended school had a completed family size of 5.7, which does not vary much from that of women with primary education, who had a completed family size of 5.4.

Table 5.5 Age specific fertility rates and total fertility rates by selected background characteristics, 2015

Background characteristics	TFR	Age group						
		15-19	20 – 24	25 – 29	30 – 34	35 – 39	40 – 44	45 – 49
Total	5.6	0.1230	0.2451	0.2548	0.2222	0.1709	0.0859	0.0128
Place of residence								
Urban	4.6	0.0919	0.1979	0.2129	0.1888	0.1463	0.0737	0.0109
Rural	6.2	0.1492	0.2814	0.2831	0.2412	0.1819	0.0897	0.0131
Region								
Northern	6.0	0.139	0.2654	0.2728	0.238	0.1844	0.0941	0.0144
Southern	6.0	0.1425	0.2756	0.2785	0.2366	0.1772	0.0863	0.0123
Eastern	5.8	0.123	0.2623	0.2731	0.2332	0.173	0.0822	0.0112
Western	4.1	0.0842	0.1754	0.1877	0.1671	0.131	0.0671	0.0103
Marital Status								
Never married	3.6	0.0582	0.1221	0.1459	0.1494	0.139	0.0897	0.0194
Married	5.5	0.2331	0.2459	0.2092	0.1738	0.1393	0.0806	0.0160
Divorced	4.1	0.1999	0.1854	0.1492	0.1201	0.0944	0.054	0.0107
Widowed	5.4	0.2182	0.2696	0.2253	0.1742	0.1243	0.0598	0.0087
Education								
Never	6.2	0.1772	0.2814	0.2693	0.2281	0.1755	0.0908	0.0145
Primary	5.5	0.1269	0.2587	0.2604	0.2164	0.1566	0.0723	0.0095
Secondary	3.9	0.0825	0.1647	0.1758	0.1583	0.1266	0.0671	0.0108
Tertiary	3.0	0.0593	0.1046	0.1181	0.1195	0.1129	0.0765	0.0182
Other	5.3	0.1205	0.2371	0.2421	0.2073	0.1563	0.0766	0.0110

Source: Statistics Sierra Leone, 2015 Population and Housing Census

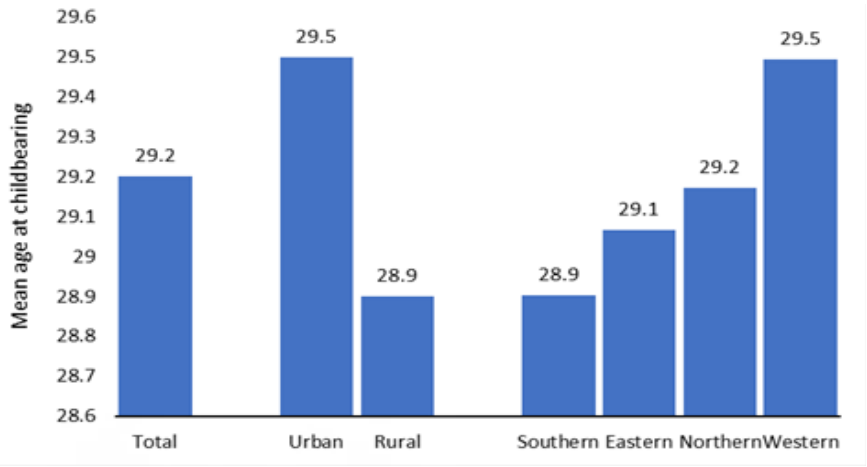
5.9 Other fertility measures

5.9.1 Mean age at childbearing

The mean age at childbearing by place of residence and region is presented in Figure 5.3. The mean age of a woman at childbearing was estimated at 29.2 years using adjusted fertility data. Compared to the 2004 estimate of 30.0 years, there was a minimal change in the mean age at childbearing over the last decade.

The mean age of childbearing varies by place of residence and region. For urban women, the mean age at childbearing was 29.5 years compared to 28.9 years for rural women. An analysis by region shows that the mean age at childbearing varies from 28.9 years in the Southern Region to 29.5 years in the Western Region.

Figure 5.3 Mean age at childbearing by place of residence and region



Source: Statistics Sierra Leone, 2015 Population and Housing Census

5.9.2 Gross and net reproduction rates

The GRR, which measures the average number of daughters to a woman with a given ASFR schedule, was 2.67 in 2015 compared to 3.05 in 2004 (Table 5.6). The NRR, which shows the average number of daughters that a woman can have given an age specific mortality and fertility schedule, was 2.04. which has changed minimally from the 2004 estimate of 2.1.

Table 5.6 Gross and net reproduction rates, 2015

Age group	Age specific fertility rate	Women in station-ary population Lx/l0*	Births
15 - 19	0.123	4.03	0.4960
20 - 24	0.245	3.95	0.9682
25 - 29	0.255	3.86	0.9824
30 - 34	0.222	3.75	0.8331
35 - 39	0.171	3.63	0.6205
40 - 44	0.086	3.50	0.3007
45 - 49	0.013	3.35	0.0430
Total	5.6		4.2
GRR*			2.67
NRR*			2.04

*Lx values are obtained from lifetable for females in the mortality chapter and the proportion of female births used in this calculation is calculated from the reported births in the 12 months before the census

Source: Statistics Sierra Leone, 2015 Population and Housing Census

5.9.3 Parity progression ratios

The parity progression ratios (PPRs) are presented in Table 5.7 for women aged 45-49 who are assumed to have completed childbearing. The census shows that 64 per cent of women aged 45-49 years who had nine children will proceed to have 10 or more children while the probability of progressing from childlessness to first birth was 92 per cent. The probability of a woman with parity six or less to have an additional child was high, ranging between 80 to 95 per cent. For example, 95 per cent of women with one child will have a second child while 84 per cent of women with four children will only have one more child.

The PPRs were higher in rural than in urban areas for women aged 45-49 years. While 84 per cent of the urban women with parity three will proceed to have an additional child, for rural women it was 91 per cent. The PPRs also indicate that 71 per cent of the women in the urban areas with seven children will have another child compared to 79 per cent of the women in the rural areas.

Table 5.7 Parity progression ratios for women aged 45-49 years, 2015

Parity progression ratio			
CEB	Total	Urban	Rural
1	0.9201	0.9138	0.9242
2	0.9522	0.9335	0.9644
3	0.9173	0.8845	0.9382
4	0.8820	0.8421	0.9058
5	0.8387	0.7876	0.8670
6	0.7984	0.7446	0.8254
7	0.7635	0.7070	0.7888
8	0.7224	0.6626	0.7460
9	0.6599	0.6010	0.6797
10+	0.6401	0.5982	0.6510

Source: Statistics Sierra Leone, 2015 Population and Housing Census

5.9.4 Childlessness

The proportion of women who remain childless through to the end of the reproductive age is taken as an indirect measure of primary infertility. However, according to Rutstein et. al., this measure does not reflect current trends in infertility. Since censuses are mostly only able to provide information on children ever born to a woman, childlessness is calculated based on women with zero parity. As such in this chapter, childlessness by age was computed like in most censuses, as the number of women in an age group who have never had a live birth divided by the number of all women in an age group. Table 5.8 shows the proportion of childless women by age in Sierra Leone.

Table 5.8 Proportion of childless women by age, 2004 and 2015

	Year of census	
Age of woman	2004	2015
15 - 19	83.6	42.9
20 - 24	43.3	20.4
25 - 29	17.6	11.9
30 - 34	10.7	9.0
35 - 39	7.9	7.2
40 - 44	8.6	7.3
45 - 49	8.1	6.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

As expected. the proportion of childless women declined with an increase in age of the woman. The pattern of age specific childlessness rate shows that 81 per cent of women aged 15-19 years were childless and this declined to 43 per cent among women aged 20-24 years. The table further shows that 8 per cent of women aged 45-49 years were childless and among women aged 40-44 years it was 8.8 per cent. Compared to the 2004 Census, 8.6 per cent of women aged 40-44 years reported being childless and 8.1 per cent of women aged 45-49 years were childless.

Table 5.9. Proportion of all childless women and married childless women by age and place of residence

	All women			Married women
Age group	Total	Urban	Rural	
15 - 19	81.2	85.5	77.7	42.9
20 - 24	42.5	48.1	37.3	20.4
25 - 29	21.6	25.6	18.4	11.9
30 - 34	13.1	15.1	11.8	9.0
35 - 39	9.3	10.5	8.5	7.2
40 - 44	8.8	9.2	8.6	7.3
45 - 49	8.0	8.6	7.6	6.8
50 - 54	8.8	8.9	8.7	7.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 5.9 shows childlessness among all women and married women by place of residence. Among all women, the proportion that was childless ranges from 81.2 per cent for women aged 15-19 years and rapidly declines to 21.6 per cent for women aged 25-29 years. It is seen that by age 45-49 years, just 8.8 per cent of all women were still childless.

Among married women, the proportion who were childless was lower for all age groups. Only 42.9 per cent of the married women aged 15-19 years were childless and by the age 25-29, 11.9 per cent of married women were childless. Regarding older women, 7.3 per cent of women aged 40-44 were childless while 6.8 per cent of women aged 45-49 years were childless.

An analysis of childlessness by place of residence shows that in the urban areas women were more likely to be childless than in the rural areas. It is also noted that as the women get older, the difference in the proportion of childlessness between urban and rural women becomes smaller. By age 45-49 years, the proportion of childless women in the urban areas was 8.6 per cent compared to 7.6 per cent in the rural areas. Among the younger women, 85.5 per cent of married women aged 15-19 in rural areas were childless compared to 77.7 per cent of women of the same age in the rural areas.

5.10 Summary

The analysis shows that fertility has slowly declined in Sierra Leone, with the TFR dropping from 6.5 in 1974 to 5.6 in 2015. The age pattern of fertility also shows a rapid increase in childbearing from age 15-19 years to 20-24 years after which the fertility rate starts to decline. The fertility data for educational attainment shows an inverse relationship between fertility and level of education of a woman. The TFR by educational attainment of the woman shows that it was 6.2 for women who have never been to school compared to 3.0 for those with tertiary education.

The TFR was also higher in the rural areas (6.2) than in the urban areas (4.6). In terms of PPR for women who have completed childbearing aged 45-49 years, it was shown that the probability of a woman with parity six or less to have an additional child was high, ranging between 80 and 95 per cent. There is minimal change in the mean age at childbearing (29.2 years) from the 2004 Census figure of 30.0 years. Childlessness as a measure of primary infertility in the population shows that 81 per cent of all women aged 15-19 years were childless but by age 45-49 years only 8 per cent of all women were still childless. Among married women aged 15-19, 42.9 per cent were childless and 11.9 per cent of women aged 25-29 years were childless.

5.11 Conclusion

There is variation in fertility among the various subgroups of women. The analysis shows high ASFRs among young women who are either married, divorced or widowed, suggesting early childbearing from early marriages.

It shows that once a woman marries, there is little or no effort to delay having children, implying the importance of children in families, even in young families. The data on ASFRs and TFRs further show that more educated women prefer small families.

The differentials by educational attainment show that women who are empowered by education are more likely to control their family size. The high PPR from parity five to six supports progression to an additional child even among women who have large families. The level of childlessness suggests that there is early childbearing, as fewer young married women were childless.

5.12 Recommendations

There is need for improvement in policies that address delayed childbearing among adolescents. Reducing fertility will require multi-sectoral approach to ensure that these young women have opportunities.

Government should take the lead in implementing policies and programmes aimed at empowering young women and should focus on encouraging them to delay having children. Education remains the key to building a generation of empowered women, because staying longer in school will delay childbearing among young women and subsequently reduce fertility among all women.

In order to effectively monitor and evaluate the policies and programmes for fertility reduction, there is a need to regularly collect high-quality data. To this end, national data systems need to be strengthened.

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CHAPTER 6: MORTALITY AND ORPHANHOOD

6.1 Introduction

The level of mortality reflects the health status of a population, including its health services. The risk of dying is also known to vary with age and sex. Deaths in children is a critical indicator of the level of socio economic development. In developing countries, children die of diseases that are preventable so targeted health programmes are able to dramatically reduce child deaths. Reduction in childhood mortality is associated with gains in life expectancy at birth, which makes it important to understand the dynamics in the population.

This chapter presents the levels and trends of childhood and adult mortality including maternal mortality and the mortality differentials. It also presents life tables which help mortality analysis, as well as information on orphanhood status of children under age 18.

6.2 Sources of data

Censuses and surveys remain the primary sources of mortality data in most developing countries due to incomplete death registration systems. Sierra Leone is not an exception. While censuses are able to provide mortality rates and levels, death registration systems have additional information such as detailed causes of death. Information on child and adult mortality from censuses is used to estimate life tables which show the probability of dying at each age.

There are already efforts being made to strengthen the vital registration system in the country. In 2016, a bill was passed which made registration of events such as deaths compulsory. In the absence of a complete registration system, the 2015 Census provided useful information for computing the mortality indicators.

Data on children born in the 12 months prior to the census, children ever born and children surviving, were collected to measure childhood mortality. Information on maternal and general deaths in the 12 months prior to the census date was also collected. Details of the deceased taken included sex, age at death, cause of death and if the death was reported to any authority or hospital.

For women who died while aged 10-54 years during the period, the respondent was asked whether she died during pregnancy or during childbirth, or during the six weeks after the end of pregnancy. This information was used for estimating maternal mortality

Information on orphanhood included questions on the survivorship of the biological parents (father and mother) of every household member aged 0 to 17 years.

6.3 Definition of concepts

Mortality refers to the occurrence of deaths in a population. A death is a complete absence of any signs of life at any time after a live birth has occurred.

Infant mortality rate (IMR): Is the probability for a newborn to die before his or her first birthday. It is expressed per 1,000 live births occurring during a specified reference period. In the case of a census, it is the preceding year. It is usually denoted IMR or by the life table notation (1q0).

Child mortality rate (CMR) is the probability for a child aged one year to die before its fifth birthday. It is expressed per 1,000 and covers a specified reference period which is one year prior to the census. It is usually denoted by CMR or the life table notation (4q1).

Under-five mortality rate (U5MR) Is the probability for a newborn to die before his or her fifth birthday. It is expressed per 1,000 live births occurring during a specified reference period, in this case taken to be one year prior to the census. It is usually denoted U5MR or by the life table notation (5q0).

Crude death rate (CDR) is the total number of deaths in a given year among a population divided by the mid-year population, expressed per 1,000 population.

Age specific death rate (ASDR) is the number of deaths in a population of a given age (or age-group) in a given year, divided by the estimated mid-year population in that age (age-group), expressed per 1,000 population.

Life expectancy at birth (e0) is the average number of years a hypothetical cohort of people born in a specific year could expect to live if they were subject to the current mortality level at each age throughout their life. Life expectancy at a specific age is the number of additional years a person could expect to live if he or she was subject to the current mortality at each age for the rest of his or her life.

Maternal mortality rate (MMRate) measures the number of maternal death per 1,000 aged 15-49.

Maternal mortality ratio (MMRatio) is the number of maternal deaths per 100,000 live births.

Orphan is a child under 18 years who has lost at least one biological parent.

6.4 Methods of analysis

Mortality measures can be estimated using direct estimation techniques or indirect estimation techniques where data are not reliable or not available. CDRs and ASDRs were calculated directly from the census data.

Regarding indirect estimation, Trussell's variant to Brass's method was used to estimate infant, child and under 5 mortality. The technique is based on the assumptions that fertility and mortality levels and patterns have remained constant in the recent past and the risk of a child dying is a function only of the age of the child and not of other factors.

Estimates of infant and childhood mortality should be interpreted with caution. This is because estimates in 2015 are based on information obtained from women aged 15-19 years. Women in this age group are known to have high child mortality because of their biological and socio-economic characteristics. As such the indicators need to be interpreted with caution.

The QFIVE programme developed by United Nations (UN) was used to estimate infant and child mortality using the census data of children ever born and children still surviving. It was assumed that adult mortality follows the Coale-Demeny North pattern based on previous mortality analysis in Sierra Leone, which also used the North model. Abridged life tables were obtained using LIFTB application in MORTPAK.

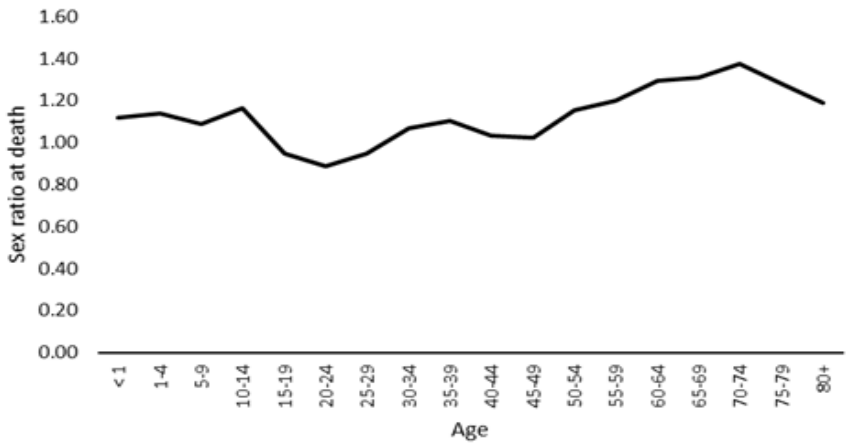
6.5 Quality of data

Mortality data from censuses are known to suffer from misreporting. For example, household members may not be ready to report the death of a household member or women may not be ready to give information about their dead children. For maternal mortality, household members may not have the relevant information on the cause of death of a female member that died while pregnant or at childbirth. This may result in misclassifying a death.

6.5.1 Evaluation of the completeness of death reporting by sex

The sex ratio at death by age is one of the indicators to examine potential sex-differences in mortality. It is expected that the sex ratios curve follows a classical well-known pattern that reflects the differences in mortality risk by sex and age group. For instance, mortality below age one is expected to be higher among boys than girls. Mortality risk is generally higher among females during childbearing age, especially in countries where maternal mortality is very high.

Figure 6.1 Sex ratio at death



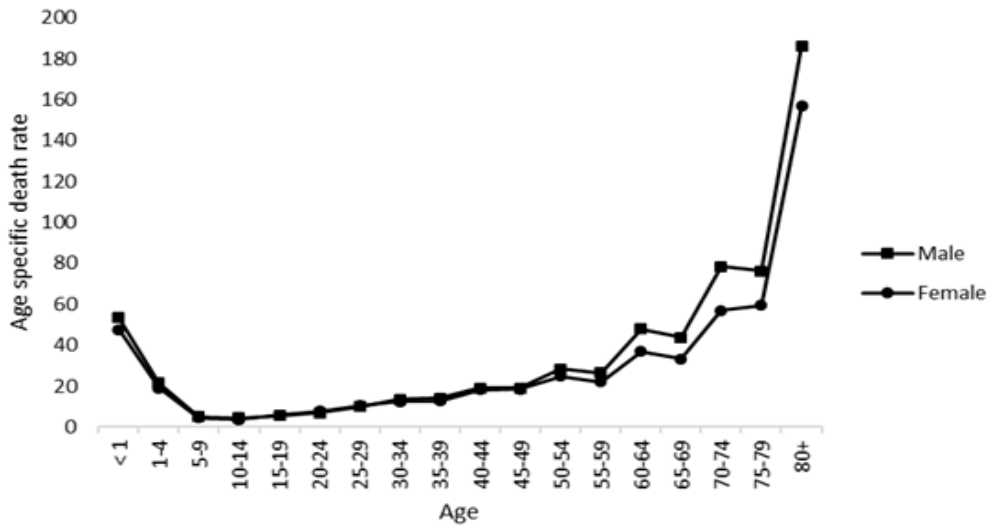
Source: Statistics Sierra Leone, 2015 Population and Housing Census

Figure 6.1 shows the sex ratios at death. The graph shows that the sex ratio at death is higher from birth to age 14, reflecting high male mortality, after which female mortality exceeds male mortality up to age 29. One probable reason could be that maternal deaths are more frequent among these younger women as this is the peak of childbearing in Sierra Leone. The sex ratio at death also starts to increase from age 50 through to the very old ages due to higher male mortality at the older ages.

6.5.2 Evaluation of the completeness and accuracy of the deaths reporting by age

Age specific mortality in developing countries is generally U-shaped due to very high child mortality and also high mortality at the older ages. With the U-shaped mortality pattern, the high mortality in children rapidly declines and reaches the minimum around 10 years. After this is starts to increase through the teenage years. Mortality starts to increase from early thirties and rapidly increases at older ages. Deviation from this expected pattern may be an indication of problems with the data on deaths. Figure 6.2 shows the expected U-shaped pattern of mortality by age for both males and females. This suggests that the quality of reported deaths from the census is of reasonably good quality.

Figure 6.2 Reported Age Specific Death Rates by sex



Source: Statistics Sierra Leone, 2015 Population and Housing Census

6.6 Levels of mortality

6.6.1 Crude death rate

There were 104,019 deaths reported in the 2015 Census making the reported CDR 14.7 per 1000. The Eastern Region had the highest CDR at 18.4 per 1000 and it was lowest in the Western Region at 10.3 per 1000 (Table 6.1). The CDR is higher among males than females.

Table 6.1 Reported crude death rates by sex and region

	Total	Male	Female
Total	14.7	15.4	14.0
Region			
Eastern	18.4	19.4	17.4
Northern	14.2	14.9	13.5
Southern	16.0	16.6	15.5
Western	10.3	10.8	9.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

6.6.2 Age pattern of mortality

Age and sex specific death rates by place of residence are presented in Table 6.2. The results show that in Sierra Leone, mortality is high in very young children (as expected in most developing countries) and starts declining after age 5 until age 24, after which mortality starts increasing. ASDRs for males were higher at young ages but ASDRs for females started getting higher than those for males from age 15 to 29. This is most likely due to an increase in maternal deaths among childbearing women as previously seen in most censuses in developing countries. Urban-rural residence shows that ASDRs were higher in rural than urban areas. However overall female mortality only exceeds that for males in the younger childbearing age groups (15-29 years). There are sex differentials in mortality by place of residence. Male ASDR mortality is much higher among urban men from ages 65-69 through to the oldest ages.

Table 6.2 Reported age specific death rates by place of residence and sex

Age group	Total			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Under 1	50.4	53.3	47.5	40.7	44.6	36.7	56.6	58.7	54.5
1-4	20.2	21.5	18.9	16.6	17.6	15.6	22.2	23.6	20.7
5-9	4.8	5.0	4.6	4.4	4.7	4.1	5.0	5.1	4.8
10-14	4.1	4.4	3.8	3.5	4.0	3.1	4.5	4.6	4.3
15-19	5.6	5.5	5.8	4.8	4.7	5.0	6.3	6.1	6.4
20-24	7.4	6.9	7.8	6.2	5.5	6.9	8.5	8.4	8.6
25-29	10.2	9.9	10.5	8.9	8.2	9.6	11.4	11.7	11.2
30-34	13.0	13.4	12.6	11.7	11.2	12.2	14.0	15.5	12.8
35-39	13.4	14.1	12.7	13.6	13.4	13.8	13.2	14.6	12.0
40-44	18.6	18.9	18.3	17.7	18.0	17.4	19.3	19.7	18.9
45-49	18.7	18.9	18.5	19.3	19.3	19.1	18.4	18.6	18.1
50-54	26.7	28.5	24.7	24.9	26.8	22.7	28.0	29.7	26.1
55-59	24.4	26.4	22.0	24.9	26.8	22.7	24.0	26.1	21.5
60-64	42.2	47.8	36.9	42.6	48.1	37.2	41.9	47.7	36.8
65-69	38.4	43.7	33.3	40.8	45.8	36.0	36.9	42.4	31.6
70-74	66.9	78.4	56.9	67.1	83.1	53.9	66.8	76.2	58.4
75-79	67.9	76.2	59.6	71.1	84.4	59.4	66.3	72.4	59.6
80+	169.8	186.2	156.7	175.2	203.9	156.9	167.5	180.2	156.7

Source: Statistics Sierra Leone, 2015 Population and Housing Census

6.6.3 Maternal mortality

The main indicators for measuring maternal mortality are maternal mortality ratio, maternal mortality rate and the proportion of maternal deaths among females at reproductive age. The other indicator of maternal mortality is the lifetime risk of maternal death.

There were 19,136 reported deaths among women aged 15-49. Out of these, 3,275 were reported as maternal deaths of which 2,017 occurred during pregnancy, 801 deaths during childbirth and 401 deaths occurred six weeks after childbirth. The P/F ratio method of indirect fertility estimation by Brass, using data on children ever born, was used to adjust upwards the reported number of births that occurred in the year prior to the census.

The adjusted ASFR are presented in the previous chapter on fertility. Using direct methods, the MMRatio is calculated using both adjusted and unadjusted births. The births among women aged 15-49 were adjusted to 328,433 births. Table 6.3 shows the MMRate, proportion of maternal deaths and unadjusted MMRatio. The data show that 17.1 per cent of deaths among females aged 15-49 years were maternal deaths. The results also show that the MMRate was 1.8 deaths per 100,000 women. The unadjusted MMRatio is 3,751. The adjusted MMRatio is estimated at 997 maternal deaths per 100,000 births, as shown in Table 6.4.

Table 6.3 Unadjusted maternal mortality indicators

Age of woman	Women	Unadjusted births	Female deaths	Maternal deaths	Proportion of maternal deaths	MMRate	Unadjusted MMRatio
15-19	442,164	10,242	2,551	552	0.22	1.25	5390
20-24	354,119	21,332	2,752	674	0.24	1.90	3160
25-29	329,751	24,008	3,454	790	0.23	2.40	3291
30-34	233,693	15,074	2,935	565	0.19	2.42	3748
35-39	219,218	11,202	2,791	412	0.15	1.88	3678
40-44	144,803	3,747	2,650	203	0.08	1.40	5418
45-49	108,205	1,701	2,003	79	0.04	0.73	4644
Total	1,831,953	87,306	19,136	3,275	0.17	1.8	3751

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 6.4. Adjusted births and adjusted maternal mortality ratio 2015

Age of woman	Adjusted births	Adjusted Mmratio
15-19	54,394	1015
20-24	86,793	777
25-29	84,022	940
30-34	51,926	1088
35-39	37,466	1100
40-44	12,445	1631
45-49	1,388	5691
Total	328,433	997

Source: Statistics Sierra Leone, 2015 Population and Housing Census

6.6.4 Infant and under-five mortality

The indirect estimates of IMR using Trussell variant of Brass method are presented in Table 6.5. The final estimate of IMR was obtained by averaging data for women in the 20-29 age groups from the North Model. The choice of the age group is based on the fact that very young women aged under 25 years and older women aged over 30 years are known to experience very high child mortality, which in turn affects the overall child mortality among women in the childbearing ages. The results show that IMR was 96 deaths per 1000 live births while the CMR was 67 deaths per 1000. The U5MR was 157 deaths per 1000.

Table 6.5 Estimates of infant mortality rate, child mortality rate and under 5 mortality rate using Trussell variant of Brass method, North pattern (both sexes)

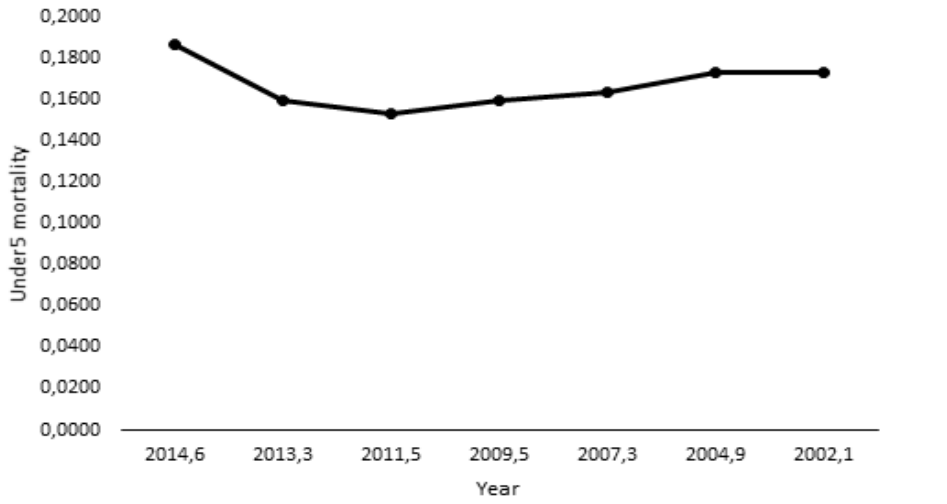
Age group	Infant mortality rate	Child mortality rate	Under 5 mortality rate	Reference Date
15-19	0.1123	0.0846	0.1874	2014.6
20-24	0.0976	0.0689	0.1598	2013.3
25-29	0.0940	0.0653	0.1531	2011.5
30-34	0.0977	0.0690	0.1599	2009.5
35-39	0.0998	0.0712	0.1640	2007.3
40-44	0.1050	0.0767	0.1737	2004.9
45-49	0.1050	0.0768	0.1737	2002.1
Both sexes	96	67	157	

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Figure 6.3 presents the U5MR showing the reference period 2002 to 2014, estimated from the same Trussell variant of Brass method. As previously mentioned, the latest period refers to under 5 mortality for young women and as the reference period moves back in time, the data were for older women, as shown in Table 6.5. The graph shows a decline in mortality between 2002 and 2014.

However, the lowest mortality rates can be seen for the period 2011. This is because data on children ever born from older women suffer from higher rates of misreporting. The high under 5 mortality rates in 2014 were for young women age 15-19 who usually have a higher risk of child mortality.

Figure 6.3 Under 5 mortality (q(5)) using Trussell variant of Brass method by reference date, North pattern (both sexes)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

6.6.5 Trends in child mortality

Trends for infant, child and under 5 mortality are presented in Table 6.6. For the past 30 years, IMR has declined from 194 deaths per 1,000 to 96 deaths per 1,000 and U5MR has declined from 327 deaths per 1,000 to 157 deaths per 1,000.

Estimates from 2008 and 2013 DHS are much lower compared to all the census estimates. However, taking into account the different estimation methodologies between census and DHS, the trend still shows that the child mortality indicators are declining.

Table 6.6 Trends in infant, child and under 5 mortality rates, 1985-2015

Year		Infant mortality rate	Child mortality rate	Under 5 mortality rate
1985	Census	194	163	327
2004	Census	115	87	194
2008	DHS	89	56	140
2013	DHS	92	70	156
2015	Census	96	67	157

6.7 Mortality differentials

Mortality is known to vary according to various factors. Some of these factors are related to the characteristics of the child such as sex; characteristics of the child's mother and father such as education and occupation; and lastly the place of residence of the child, typically being urban-rural residence and region. Table 6.7 presents child mortality indicators by sex of the child, place of residence, region and education of the mother.

Table 6.7 Infant, child and under 5 mortality by selected background characteristics, 2015

Characteristics	Infant mortality rate	Child mortality rate	Under 5 mortality rate
Sex of child			
Male	103	68	164
Female	89	66	148
Place of residence			
Urban	88	60	143
Rural	99	70	162
Region			
Northern	102	73	167
Southern	102	73	167
Eastern	87	59	141
Western	85	56	136
Education of mother			
No education	94	65	153
Primary	108	81	180
Secondary	79	51	125
Tertiary	63	38	98

6.7.1 Sex of child

All childhood mortality indicators show that the rates for male children are higher than for female children. IMR among male children is 103 per 1,000 compared to 89 per 1,000 for females and U5MR for males is 164 per 1,000 compared to 148 per 1,000 for females. The variation between males and females is quite small for children aged one to four years ,as reflected in the CMR, 68 and 66 per 1,000 respectively.

6.7.2 Place of residence

The data show that IMR was higher in rural areas at 99 per 1,000 compared to 88 per 1,000 in urban areas. There was also notable variation in CMR and the overall U5MR. In urban areas, the U5MR was estimated at 143 per 1,000 and in rural areas it was higher at 162 per 1,000.
6.7.3 Region

There were regional differences in child mortality with the Western Region having the lowest rates. The IMR is 85 per 1,000 in the Western Region and it was highest in the Southern Region at 102 per 1,000. The U5MR was 136 per 1,000 in the Western Region and it rose to 167 per 1,000 in the Southern Region.

6.7.3 Educational attainment of mother

The inverse relationship between child mortality rate and level of maternal education was shown in the 2015 census data. This is consistent with previous data for Sierra Leone, as child mortality rates decline with an increase in the mother's education. IMR among women with tertiary education is 63 per 1.000 and it rises to 108 per 1,000 among women with primary education. Child mortality ranges from 38 among women with tertiary education to 81 among women with primary education. The same trend is observed for U5MRs. It is interesting to note that women with no education have lower mortality than women with primary education. This is a pattern which has been observed in other surveys in Sierra Leone, such as the 2013 DHS.

6.8 Construction of empirical life tables

Life tables are important in the analysis of mortality patterns by age. One of the important measures presented in the life table is the life expectancy at birth and at all other ages. All the life tables presented in this chapter are abridged life tables which show the mortality measures by age. The life tables are presented separately for males and females. Reported deaths for the 12 month period before the census were used for the calculation of ASDRs, which was input into the tables.

The life tables were firstly constructed based on the observed ASDRs (mx) values using the application LIFTB in Mortpak. The life table method used was based on the approach of Greville, which allows calculation of age-specific separation factors based on the age pattern of the mortality rates. The central death rates in the life table are assumed to be the same with that of the population. It also has to be noted that the value of m(x) for the last age group (80+) is calculated by the LIFTB procedure. After the life table was constructed, smoothing of the probability of dying (q(x)) was done using the procedure UNABR also available in Mortpak. The smoothed q(x) values were used in the construction of the final life tables.

For comparison, Coale-Demeny model life tables following North pattern were constructed for males and females at national level. The IMR from indirect method presented earlier in this chapter was used as input. The estimated life expectancies at birth from these model life tables were higher, with males having 51.1 years compared to 54.3 years for females. The difference in the male and female life expectancies at birth was 3.2 years, which is not very different from age gap in life expectancies by sex from empirical life tables. Life expectancy from the empirical life tables is summarised in Table 6.8. The results show that life expectancy at birth for males was 47.6 years compared with a higher life expectancy for females at 51.3 years. The difference between the life expectancy at birth of males and females was 3.7 years.

The life expectancy at birth is higher in urban areas than rural areas. There are also regional variations in life expectancies at birth, with the Western Region having the highest life expectancy while the Eastern Region has the lowest life expectancy. The regional differences could be due to the differences in urban population, the Western Region being predominantly urban compared to all the other regions. An urban population is likely to have better access to social services such as health, which reduces their chances of dying.

There is slight improvement from 2004, where the male life expectancy at birth was estimated at 47.5 years and 49.4 years for females with an age gap difference of 1.9 years.

Table 6.8 Life expectancy at birth for males and females

	Males	Females
National	47.6	51.3
Place of residence		
Urban	48.4	53.1
Rural	47.5	50.3
Region		
Eastern	44.1	45.5
Northern	48.0	52.8
Southern	48.3	50.2
Western	55.1	59.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

6.8.1 Empirical life tables

Empirical life tables for males and females are presented in Tables 6.9 and 6.10 respectively. The age pattern of mortality presented in the life tables is U shaped, similar to that for the reported ASDR. Life expectancy at birth is one of the most important pieces of information presented in the lifetable.

Male life expectancy at birth is 47.6 years and females is 51.3 years. Based on the 2015 death rates, a male aged 25 is expected to live 35.8 years if the mortality conditions remained constant, while a female of the same age is expected to live another 37.6 years. The gap in life expectancy between males and females narrows at the older ages, from age 60. Life tables by place of residence are presented in the appendix.

Table 6.9 Empirical life tables for males

Age	m(x,n)	q(x,n)	l(x)	d(x,n)	L(x,n)	T(x)	e(x)
0	0.0703	0.0667	100000	6667	94894	4762252	47.6
1	0.0241	0.0909	93333	8479	351728	4667357	50.0
5	0.0059	0.0292	84854	2478	418074	4315630	50.9
10	0.0044	0.0217	82376	1791	407403	3897555	47.3
15	0.0056	0.0276	80585	2222	397583	3490153	43.3
20	0.0073	0.0361	78363	2826	385012	3092570	39.5
25	0.0093	0.0457	75538	3450	369323	2707558	35.8
30	0.0116	0.0563	72088	4056	350549	2338235	32.4
35	0.0141	0.0681	68032	4631	328818	1987686	29.2
40	0.0170	0.0815	63401	5170	304301	1658868	26.2
45	0.0205	0.0974	58231	5671	277183	1354567	23.3
50	0.0248	0.1167	52560	6131	247658	1077384	20.5
55	0.0303	0.1408	46429	6539	215956	829726	17.9
60	0.0376	0.1721	39890	6864	182402	613770	15.4
65	0.0477	0.2132	33026	7041	147555	431368	13.1
70	0.0619	0.2677	25984	6956	112422	283814	10.9
75	0.0821	0.3392	19029	6454	78633	171392	9.0
80	0.1356	...	12574	12574	92759	92759	7.4

Table 6.10 Empirical life tables for females

Age	m(x,n)	q(x,n)	l(x)	d(x,n)	L(x,n)	T(x)	e(x)
0	0.0475	0.0457	100000	4574	96282	5129356	51.3
1	0.0190	0.0725	95426	6914	364071	5033074	52.7
5	0.0046	0.0226	88512	2000	437561	4669002	52.7
10	0.0038	0.0188	86512	1624	428500	4231441	48.9
15	0.0057	0.0281	84888	2388	418811	3802941	44.8
20	0.0079	0.0390	82500	3215	404795	3384130	41.0
25	0.0101	0.0494	79285	3915	386906	2979335	37.6
30	0.0122	0.0592	75370	4463	365897	2592429	34.4
35	0.0142	0.0688	70907	4880	342489	2226533	31.4
40	0.0164	0.0787	66027	5199	317259	1884043	28.5
45	0.0188	0.0898	60828	5461	290594	1566784	25.8
50	0.0217	0.1030	55367	5702	262687	1276189	23.0
55	0.0255	0.1198	49666	5950	233562	1013503	20.4
60	0.0306	0.1422	43715	6215	203152	779941	17.8
65	0.0377	0.1725	37501	6469	171427	576789	15.4
70	0.0479	0.2139	31032	6637	138601	405362	13.1
75	0.0624	0.2697	24395	6579	105363	266761	10.9
80	0.1104	...	17816	17816	161398	161398	9.1

6.9 Levels of orphanhood

In Sierra Leone, 13 per cent of children aged below 18 years were orphans, as shown in Table 6.11. Most of the orphans had lost their father with 8.6 per cent of children having only the mother alive, while 2.5 per cent of the children had only the father alive. The proportion of children who have lost at least one parent, also known as single orphanhood ,was 11.1 per cent. The results also show that 1.9 per cent of the children had lost both parents, also known as double orphanhood.

6.9.1 Differentials of orphanhood

Table 6.11 also presents information on orphanhood by age, sex of child, place of residence and region. Orphanhood varies with age, with older children being more likely to be orphans. While 6.5 per cent of children aged below the age of 5 were orphans, a higher proportion, 22.7 per cent of those aged between 15-17 years are orphans. There is minimal variation in orphanhood by sex of child and place of residence. However, orphanhood is slightly higher in urban areas. The analysis by region shows that the proportion of orphans among children ranges from 10.6 per cent in the Southern Region to 14.7 per cent in the Northern Region. The regional pattern shows that most orphans have only their mother alive.

Table 6.11 Orphanhood by selected characteristics among children aged 0-17 years

	Number			Percent				
	Only mother alive	Only father alive	Both parents dead	Only mother alive	Only father alive	Single orphan	Double orphan	Orphan
Total	291,820	84,399	66,093	8.6	2.5	11.1	1.9	13.0
Age of Child								
0-4	39,703	10,449	9,864	4.3	1.1	5.4	1.1	6.5
5-9	83,416	24,836	18,342	7.5	2.2	9.8	1.7	11.5
10-14	91,707	27,256	19,896	10.9	3.2	14.1	2.4	16.5
15-17	76,994	21,858	17,991	15.0	4.2	19.2	3.5	22.7
Sex of child								
Male	145,661	43,097	33,704	8.5	2.5	11.0	2.0	13.0
Female	146,159	41,302	32,389	8.6	2.4	11.1	1.9	13.0
Place of residence								
Urban	110,304	32,934	25,321	8.7	2.6	11.3	2.0	13.3
Rural	181,516	51,465	40,772	8.5	2.4	11.0	1.9	12.9
Region								
Eastern	67,874	18,144	15,273	8.5	2.3	10.7	1.9	12.6
Northern	124,502	34,424	28,589	9.8	2.7	12.5	2.2	14.7
Southern	49,587	15,848	9,672	7.0	2.2	9.2	1.4	10.6
Western	49,857	15,983	12,559	8.2	2.6	10.8	2.1	12.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

6.10 Summary, conclusion and recommendations

6.10.1 Summary

The reported CDR is 14.7 per 1000 population. The results also show that the IMR for Sierra Leone is 96 deaths per 1000 while the CMR is 67 deaths per 1000. The U5MR is 157 deaths per 1000. The educational attainment of a mother affects her child's survival rates, with women with tertiary education having an IMR of 63 per 1,000 compared to 108 per 1,000 among women with primary education.

The results show that women have a higher life expectancy at birth of 51.3 years, compared to 47.6 years for men. The difference between the life expectancy at birth of males and females is 3.7 years. MMRate is 1.8 deaths per 100,000 women while the adjusted MMRatio is estimated at 997 maternal deaths per 100,000 births. Most maternal deaths occur during pregnancy.
The data also show that 13 per cent of children aged below 18 years are orphans.

6.10.2 Conclusion

The CDRs and ASDR confirm that female mortality is lower than male mortality. For the past 30 years, all the child mortality indicators show that mortality is improving, even though child mortality remains high. There is still significant variation in child mortality by various subgroups, such as education of the mother.

There has been improvement in life expectancy at birth in the last decade but maternal mortality remains high. Orphaned children are more likely to have lost their father than their mother. There is minimal variation by age of the child, place of residence and region.

6.10.3 Recommendations

The results show that more needs to be done to improve living standards which in turn affects the levels of mortality. There is also a need to improve health services for children, as excess mortality at this age is caused by easily preventable diseases such as diaorrhea and malaria. The high maternal mortality implies that pregnant women are at high risk of death and need better health services. There need to be better basic health care centres so that women can attend antenatal clinics to reduce child and maternal mortality.

These improvements would help the country achieve the sustainable goal of ensuring healthy lives and promoting well-being for all, at all ages. The country also has a substantial number of orphans and must support these children with extra support, including education.

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APPENDIX

The following life table functions are defined as follows:

nmx = Age-specific mortality rates, that is, death rates calculated of each age groups (from x to x+n)

nqx = Probability of dying between exact ages x and x+n

Ix = Number of survivors at age x out of 100,000 birth

ndx = Number of deaths occurring between age x and x+n

nLx = Number of person-years lived between ages x and x+n

Tx = Number of person-years lived afer age x

ex = Life expectancy at age x

Table A6.1 Empirical life tables, males (urban)

Age	m(x,n)	q(x,n)	l(x)	d(x,n)	L(x,n)	T(x)	e(x)
0	0.0594	0.0567	100000	5670	95495	4836179	48.4
1	0.0182	0.0694	94330	6550	360827	4740684	50.3
5	0.0053	0.0260	87780	2280	433200	4379856	49.9
10	0.0041	0.0202	85500	1726	423185	3946657	46.2
15	0.0052	0.0255	83774	2133	413754	3523472	42.1
20	0.0070	0.0344	81641	2808	401489	3109718	38.1
25	0.0093	0.0454	78833	3580	385549	2708229	34.4
30	0.0120	0.0582	75254	4377	365658	2322681	30.9
35	0.0151	0.0727	70877	5151	341821	1957022	27.6
40	0.0187	0.0893	65725	5867	314245	1615202	24.6
45	0.0229	0.1085	59859	6493	283303	1300957	21.7
50	0.0281	0.1312	53366	7004	249509	1017653	19.1
55	0.0345	0.1590	46362	7372	213503	768145	16.6
60	0.0429	0.1939	38990	7560	176087	554642	14.2
65	0.0543	0.2389	31430	7508	138298	378555	12.0
70	0.0701	0.2978	23922	7123	101559	240257	10.0
75	0.0929	0.3746	16799	6293	67749	138698	8.3
80	0.1481	...	10506	10506	70949	70949	6.8

Table A6.2. Empirical life tables, females (urban)

Age	m(x,n)	q(x,n)	l(x)	d(x,n)	L(x,n)	T(x)	e(x)
0	0.0367	0.0356	100000	3563	96996	5308298	53.1
1	0.0155	0.0597	96437	5753	371169	5211302	54.0
5	0.0041	0.0204	90684	1846	448802	4840133	53.4
10	0.0031	0.0155	88837	1374	440750	4391331	49.4
15	0.0048	0.0240	87463	2095	432421	3950581	45.2
20	0.0072	0.0353	85368	3013	419692	3518160	41.2
25	0.0096	0.0468	82356	3853	402474	3098468	37.6
30	0.0119	0.0578	78503	4535	381434	2695994	34.3
35	0.0142	0.0684	73968	5059	357386	2314559	31.3
40	0.0165	0.0792	68908	5458	331048	1957173	28.4
45	0.0191	0.0910	63450	5775	302938	1626126	25.6
50	0.0221	0.1049	57675	6051	273361	1323188	22.9
55	0.0261	0.1223	51624	6316	242441	1049826	20.3
60	0.0313	0.1451	45308	6572	210213	807385	17.8
65	0.0384	0.1753	38736	6791	176775	597172	15.4
70	0.0483	0.2157	31945	6890	142500	420398	13.2
75	0.0623	0.2689	25055	6738	108235	277898	11.1
80	0.1080	...	18317	18317	169663	169663	9.3

Table A6.3. Empirical life tables, males (rural)

Age	m(x,n)	q(x,n)	l(x)	d(x,n)	L(x,n)	T(x)	e(x)
0	0.0594	0.0567	100000	5674	95493	4751363	47.5
1	0.0230	0.0869	94326	8200	356657	4655871	49.4
5	0.0052	0.0258	86126	2220	425080	4299213	49.9
10	0.0043	0.0215	83906	1803	415022	3874133	46.2
15	0.0065	0.0319	82103	2615	404329	3459111	42.1
20	0.0089	0.0434	79488	3446	389151	3054782	38.4
25	0.0111	0.0542	76042	4121	370164	2665631	35.1
30	0.0133	0.0646	71921	4643	348197	2295467	31.9
35	0.0156	0.0751	67279	5053	323921	1947270	28.9
40	0.0181	0.0868	62226	5398	297775	1623349	26.1
45	0.0212	0.1006	56828	5718	269980	1325573	23.3
50	0.0251	0.1181	51110	6036	240595	1055593	20.7
55	0.0303	0.1409	45074	6349	209627	814998	18.1
60	0.0374	0.1709	38726	6620	177172	605372	15.6
65	0.0471	0.2107	32106	6764	143636	428199	13.3
70	0.0605	0.2625	25342	6652	109960	284564	11.2
75	0.0789	0.3284	18691	6139	77757	174604	9.3
80	0.1296	...	12552	12552	96847	96847	7.7

Table A6.4 Empirical life tables, females (rural)

Age	m(x,n)	q(x,n)	l(x)	d(x,n)	L(x,n)	T(x)	e(x)
0	0.0543	0.0521	100000	5206	95867	5028334	50.3
1	0.0208	0.0791	94794	7495	359983	4932466	52.0
5	0.0048	0.0238	87299	2081	431290	4572484	52.4
10	0.0043	0.0214	85217	1825	421524	4141194	48.6
15	0.0064	0.0315	83392	2630	410725	3719670	44.6
20	0.0086	0.0421	80762	3398	395608	3308945	41.0
25	0.0106	0.0516	77363	3992	377056	2913336	37.7
30	0.0124	0.0603	73371	4423	355958	2536280	34.6
35	0.0142	0.0687	68949	4735	333022	2180322	31.6
40	0.0161	0.0776	64213	4980	308715	1847300	28.8
45	0.0184	0.0878	59234	5200	283263	1538586	26.0
50	0.0212	0.1006	54033	5434	256689	1255323	23.2
55	0.0249	0.1173	48600	5702	228866	998634	20.5
60	0.0301	0.1399	42898	6003	199612	769768	17.9
65	0.0373	0.1708	36895	6300	168836	570156	15.5
70	0.0475	0.2125	30595	6503	136762	401321	13.1
75	0.0620	0.2682	24092	6462	104155	264559	11.0
80	0.1099	...	17630	17630	160403	160403	9.1

CHAPTER 7: MIGRATION AND URBANIZATION

7.1 Introduction

Migration, alongside fertility and mortality, is a major component of population change. As more people move from one place to another in search of new opportunities, their movement – migration – has great implications for a country's housing, services and employment provision.

There are many factors that force or encourage people to move out of or to an area, called push and pull factors. As cities grow, many countries experience rural to urban migration. Urbanization happens when economic opportunities draw people from rural areas to urban areas. This results in a growing urban population and requires proper planning of services such as housing, water and sanitation. As such, there is linkage between internal migration and urbanization.
Previous censuses have shown that there has been notable migration within the country. During the Civil War, there was population displacement with most people moving to the capital city, resulting in rapid population growth. Since the war, migration from rural to urban areas for economic opportunities has continued.

The Government realizes that well-managed migration within and between countries greatly contributes to economic development. It has begun many initiatives to address migration and urbanization. There is a 2010 national decentralisation policy which aims at addressing the inequality in regional resource distribution. It is also in the process of developing a national labour migration policy to benefit from the development impact of labour migration. This chapter presents information on levels and trends of migration and urbanization.

7.2 Definitions of concepts

Migration is defined as a move from one migration defining area to another (or a move of some specified minimum distance) made during a given migration interval and that involved a change of residence (UN, 1970). A life-time migrant is one who has moved from his place of birth to the place where he is enumerated at the time of the census, irrespective of the number of times he migrates. A recent migrant is one whose place of residence five years ago was different to where he is enumerated at the time of the census.

In-migrants are defined as those internal migrants who have migrated to the destination from the origin. All migrants who may have migrated and settled in the destination from various origins are called in-migrants to the destination. Out-migrants are those internal migrants who leave their place of origin and migrate to different destination areas. For the district or the place of origin, they are defined as out-migrants. Non-movers are those people who did not change their residence during the reference period.

Net-migration is the difference between out-migration and in-migration in any defined geographical areas within a specified period. With positive net-migration, the region gains more population than it sends out and with net negative migration, the region loses more population than it receives. Net-migration makes a difference to the size of the population in a region, but nationally the balance between in and out-migration is zero.

Urbanization is characterized by population growth in urban areas, mostly due to migration from rural areas. Countries are becoming more urbanized because of the increase in the proportion of urban population to the total population. The level of urbanization is defined as the percentage of urban population to the total population for a specific period. The tempo of urbanization is the rate of change in the level of urbanization or simply how rapidly it is taking place. One of the measures of urbanization is the urban-rural ratio which is the number of urban residents for each person living in the rural areas. Thus, if the index has a value of 1 (or 100), it means that the urban population is equal to the rural population.

7.3 Sources of migration and urbanization data

A census is a more reliable source for measuring internal migration than international migration. Migration is measured in terms of stocks and flows. Any change in the volume and flow of migration will change the size, growth and characteristics of the population, both in the place of origin and place of destination.

The 2015 Census collected information on place of current residence, place of birth and place of residence five years before the census from all persons. This information is useful for analysing life-time migration by looking at place of birth with the place of enumeration during the census. Recent migration was analysed by looking at place of previous residence five years prior to the census with the place of enumeration during the census.

The basic measures of migration, in-migration rate, out-migration rate and net migration rate, were computed from the census. The foreign-born population constitutes migration stock while in and out-migration rates measure migration flow. Considering that the definition of migration focuses on change in usual residence, the measurement is a problem as a person can move several times. Therefore, duration at a place of residence becomes important during analysis of recent migration. The 2015 Census, like the previous census, did not collect information on usual place of residence and duration at the current place of residence. In this case, the place of enumeration has been used instead.

Globally, there is no single definition of an urban area which makes country comparisons of urbanization difficult. The common measures are level of urbanization measured by percentage of urban population of the total population. Another measure is tempo of urbanization measured as rate of change of urban population growth, and finally ratio of urban to rural population.

7.4 Limitations of data

One of the limitations of measuring volume of migration using the place of birth is that it does not capture the exact time of arrival of the migrants or previous migratory data (Kpedekpo, 1982). Between birth and the time of enumeration, a person may have migrated several times. For example, in terms of district data, in places where migration is seasonal, the migrants and non-migrants are not fully distinguished, for the same reason that multiple movements are not captured in the census.

The other limitation is that censuses are regular but not frequent. In Sierra Leone they only take place every 10 years. Consequently, the migration indicators refer to the census year only.

Lastly, the comparison of internal migration indicators between censuses may be a challenge due to changes in sub-national boundaries. These include changes in district and lower level geographic areas, including changes in urban boundaries, which hinder comparison of internal migration. However, despite all these limitations, the census remains an important source of migration data.

7.5 Internal migration

7.5.1 Current distribution of population in Sierra Leone

There were 7,076,119 persons enumerated during the census in Sierra Leone of which 37,503 were non-Sierra Leoneans. In terms of percentage, 99.5 percent were Sierra Leoneans while non-Sierra Leoneans constituted 0.5 percent. Table 7.1 shows the distribution of Sierra Leoneans and non-Sierra Leoneans in the regions by sex. The results show that a high proportion of Sierra Leoneans were in the Northern region (35.5 percent) followed by the Eastern region (23.2 percent), the Southern region 20.4 percent and lastly the Western region (21 percent). Non-Sierra Leoneans were mostly in the Western region (47 percent) followed by the Eastern region (24 percent).

Table 7.1 Distribution of Sierra Leoneans and non-Sierra Leoneans by region and sex

Region	Sierra Leoneans			Non-Sierra Leoneans		
	Total	Male	Female	Total	Male	Female
Eastern	23.2	23.4	23.0	24.0	23.4	24.8
Northern	35.5	35.2	35.7	15.0	14.3	15.8
Southern	20.4	20.2	20.6	14.1	13.5	14.8
Western	21.0	21.2	20.7	47.0	48.7	44.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	7,038,216	3,457,745	3,580,471	37,903	21,888	16,015

Source: Statistics Sierra Leone, 2015 Population and Housing Census

7.5.2 Population redistribution

The information presented in Table 7.2 shows the population by place of birth, place of residence and sex. The place of birth is analysed at the district level. The data show that 80.1 per cent of the population did not move from their district of birth. While 13.7 per cent of the population was born in other regions, only 4.5 per cent of the population had moved to another district within the same region of birth. A higher proportion (92.7 per cent) of the rural population had not moved from their district of birth, compared to 61.5 per cent in the urban areas. Only 3.4 per cent of the rural population was born in other regions, compared to 28.5 per cent of the urban population that was born in other regions. There is minimal variation in the migration pattern between males and females.

An analysis of inter-regional migration shows that there were 5,989,354 persons who had not moved from their region of birth, representing 84.6 per cent of the population.

Table 7.2 Population classified by place of birth, place of residence and sex

Region	Total country	Rural			Urban		
		Total	Male	Female	Total	Male	Female
Total	7,076,119	4,182,612	2,049,590	2,133,022	2,893,507	1,430,043	1,463,464
Born in place of enumeration	5,670,753	3,891,321	1,900,547	1,990,774	1,779,432	873,050	906,382
Born elsewhere in region of enumeration	318,601	113,503	54,386	59,117	205,098	99,254	105,844
Born in other regions	966,874	141,975	76,527	65,448	824,899	412,684	412,215

Table 7.2 Population classified by place of birth, place of residence and sex (continued)

Region	Total country	Rural			Urban		
		Total	Male	Female	Total	Male	Female
Others	119,891	35,813	18,130	17,683	84,078	45,055	39,023
Percentages							
Born in place of enumeration	80.1	93.0	92.7	93.3	61.5	61.1	61.9
Born elsewhere in region of enumeration	4.5	2.7	2.7	2.8	7.1	6.9	7.2
Born in other regions	13.7	3.4	3.7	3.1	28.5	28.9	28.2
Others	1.7	0.9	0.9	0.8	2.9	3.2	2.7

Source: Statistics Sierra Leone, 2015 Population and Housing Census

There were 119,891 persons who were foreign born or who did not indicate their exact place of birth in Sierra Leone. In terms of proportion, they made up 1.7 per cent of the total enumerated population. They were excluded from subsequent analysis.

7.5.3 Lifetime migration

Table 7.3 presents the population by region of birth. The Northern Region had 2,418,215 non-movers, the largest at the regional level, followed by the Eastern Region with 1,489,537. Migration was lowest in the Western Region, with 750,136 non-movers. An analysis of inter-regional migration shows there were 5,989,354 persons who had not moved from their region of birth, representing 84.6 per cent of the population.

Table 7.3 Population by region of residence during enumeration and place of birth

		Place of birth			
Region	Total	Eastern	Northern	Southern	Western
Total	7,076,119	1,664,587	2,977,009	1,519,945	794,687
Eastern	1,613,439	1,489,537	75,387	41,011	7,504
Northern	2,481,622	21,063	2,418,215	17,672	24,672
Southern	1,423,298	42,147	37,310	1,331,466	12,375
Western	1,437,869	111,840	446,097	129,796	750,136

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 7.4 shows lifetime in-migration, out-migration and net migration rates at the regional level. Each region has had lifetime out-migrants and in-migrants. The in-migration rate ranged from 2.6 per cent in the Northern Region to 47.8 per cent in the Western Region. One half of the population in the Western Region was born elsewhere. The lifetime out-migration rate was much higher in the Northern Region (18.8 per cent) compared to the Western Region (5.6 per cent).

In terms of volume, each region except the Western Region had negative net migration, meaning that these regions were net losers of lifetime migrants. The net gain of lifetime migrants in the Western Region was 643,182 persons and the net loss of lifetime migrants in the Northern Region was 495,387 persons. This translates to a net lifetime migration rate of 43 per cent in the Western Region and -19.8 per cent in the Northern Region.

Table 7.4 Lifetime in-migration, out-migration and net migration

Region	Enumerated population	In-migrants	Out-migrants	In-migration rate	Out-migration rate	Net migration	Net migra-tion rate	Non-movers
Eastern	1,640,592	123,902	175,050	7.7	10.5	-51,148	-3.1	1,489,537
Northern	2,502,583	63,407	558,794	2.6	18.8	-495,387	-19.8	2,418,215
Southern	1,439,165	91,832	188,479	6.5	12.4	-96,647	-6.7	1,331,466
Western	1,493,779	687,733	44,551	47.8	5.6	643,182	43.1	750,136

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Lifetime in-migration was highest in the Western Rural district with in-migration rate of 63.4 per cent, followed by Western Urban at 48.1 per cent (Table 7.5). Only four districts, namely Kenema, Bo, Western Rural and Western Urban, were net gainers of lifetime migrants. The biggest net gainer was Western Urban, with net lifetime migrants of 396,663, followed by Western Rural with 246,519 net migrants. Western Rural had the highest net migration rate of 55.6 per cent followed by Western Urban (37.8 per cent) and Bombali had a net migration rate of -24.7 per cent.

Table 7.5 Lifetime in-migration, out-migration and net migration by district

Districts	Enumerated population	In-migrants	Out-migrants	In-migration rate	Out-migration rate	Net migration	Net migra-tion rate	Non-movers
Kailahun	574,334	22,325	78,112	4.3	13.6	-55,787	-10.6	518,547
Kenema	589,618	98,736	88,565	16.5	15.0	10,171	1.7	599,789
Kono	500,635	61,416	66,948	12.4	13.4	-5,532	-1.1	495,103
Bombali	749,716	60,961	210,403	10.2	28.1	-149,442	-24.7	600,274

Table 7.5 Lifetime in-migration, out-migration and net migration by district (continued)

District	Enumerated population	In-migrants	Out-migrants	In-migration rate	Out-migration rate	Net migration	Net migra-tion rate	Non-movers
Kambia	424,488	16,230	99,327	4.8	23.4	-83,097	-24.1	341,391
Koinadugu	458,169	10,518	63,557	2.6	13.9	-53,039	-13.0	405,130
Port Loko	721,593	56,351	168,760	9.3	23.4	-112,409	-18.3	609,184
Tonkolili	623,043	26,073	123,473	5.0	19.8	-97,400	-18.3	525,643
Bo	559,074	104,813	99,440	18.6	17.8	5,373	0.9	564,447
Bonthe	225,276	16,785	42,041	8.4	18.7	-25,256	-12.6	200,020
Moyamba	373,959	28,358	87,268	9.0	23.3	-58,910	-18.5	315,049
Pujehun	361,636	24,920	42,774	7.2	11.8	-17,854	-5.2	343,782
Western Rural	185,833	274,274	27,755	63.4	14.9	246,519	55.6	432,352
Western Urban	608,854	483,715	87,052	48.1	14.3	396,663	37.8	1,005,517

Source: Statistics Sierra Leone, 2015 Population and Housing Census

7.5.4 Recent migration

Table 7.6 shows that 5,769,799 persons, representing 81.5 per cent of the population, did not move from their region in the five-year period before the enumeration.

Table 7.6 Population by region of residence during enumeration and region of residence five years before enumeration

		Region of residence five years before enumeration			
Region	Total	Eastern	Northern	Southern	Western
Total	1,417,062	1,390,914	11,276	8,206	6,666
Eastern	2,111,568	8,887	2,074,136	5,785	22,760
Northern	1,214,495	12,713	5,960	1,184,663	11,159
Southern	1,239,705	22,745	71,760	25,114	1,120,086
Western	1,437,869	111,840	446,097	129,796	750,136

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 7.7 shows the recent migration indicators by region. While 119,619 persons recently migrated into the Western Region, 88,998 migrated out of the Northern Region. The recent net migration rate for the Northern Region was -2.1 per cent compared with 5.3 per cent for the Western Region.

Table 7.7 Recent in-migration, out-migration and net migration by region

Region	Enumerated population	In-migrants	Out-migrants	In-migration rate	Out-migration rate	Net migration	Net migra-tion rate	Non-movers
Eastern	1,640,592	26,148	44,345	1.8	3.1	-18,197	-1.1	1,390,914
Northern	2,502,583	37,432	88,996	1.8	4.1	-51,564	-2.1	2,074,136
Southern	1,439,165	29,832	39,105	2.5	3.2	-9,273	-0.6	1,184,663
Western	1,493,779	119,619	40,585	9.6	3.5	79,034	5.3	1,120,086

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 7.8 presents the recent migration indicators by district. It is interesting to note that only three districts namely, Western Rural, Pujehun and Kailuhun, were net gainers of recent migrants. Western Rural had the most notable net migration rate of 21.7 per cent. The districts with notable negative net migration rates were Kambia (-3.4 per cent), Kenema (-2.6 per cent), Port Loko (-2.6 per cent), Tonkolili (-2.4 per cent) and Bombali (-2.4 per cent).

Table 7.8 Recent in-migration, out-migration and net migration by district

District	Enumerated population	In-migrants	Out-migrants	In-migration rate	Out-migration rate	Net migration	Net migration rate	Non-movers
Kailahun	458,919	13,190	11,106	2.9	2.4	2,084	0.4	445,729
Kailahun	458,919	13,190	11,106	2.9	2.4	2,084	0.4	445,729
Kenema	523,511	17,599	31,428	3.4	5.8	-13,829	-2.6	505,912
Kono	434,632	11,828	18,280	2.7	4.1	-6,452	-1.5	422,804
Bombali	513,144	22,540	35,029	4.4	6.7	-12,489	-2.4	490,604
Kumbia	286,477	5,573	15,374	1.9	5.2	-9,801	-3.4	280,904
Koinadugu	354,863	4,860	9,689	1.4	2.7	-4,829	-1.3	350,003
Port Loko	512,524	18,111	31,822	3.5	6.0	-13,711	-2.6	494,413
Tonkolili	444,560	9,767	20,501	2.2	4.5	-10,734	-2.4	434,793
Bo	479,290	22,270	32,208	4.6	6.6	-9,938	-2.0	457,020
Bonthe	171,791	6,522	7,866	3.8	4.5	-1,344	-0.8	165,269

Table 7.8. Recent in-migration, out-migration and net migration by district (continued)

District	Enumerated population	In-migrants	Out-migrants	In-migration rate	Out-migration rate	Net migration	Net migra-tion rate	Non-movers
Moyamba	264,218	9,456	14,940	3.6	5.5	-5,484	-2.1	254,762
Pujehun	299,196	13,482	5,989	4.5	2.1	7,493	2.5	285,714
Western Rural	372,464	99,338	15,753	26.7	5.5	83,585	21.7	273,126
Western Urban	867,241	78,765	83,316	9.1	9.6	-4,551	-0.5	788,476

Source: Statistics Sierra Leone, 2015 Population and Housing Census

7.6 Migration effectiveness

Migration effectiveness ratio (MER) is the ratio of net migration to gross migration. It compares the total net gain or loss to the gross migration. Essentially it helps to assess how effective migration has been in redistributing the population. In general, values under 15 indicate relatively ineffective population redistribution due to migration; values over 15 indicate that migration, in the reference period, had a significant effect in redistributing the population in the region.

All the other three regions had negative MERs. The Northern Region had the biggest net losses in terms of both recent and lifetime migration with MERs of -40.8 per cent and -79.6 per cent respectively. For recent migration, the Eastern Region followed the Northern Region in experiencing losses with MER of -25.8 per cent. For lifetime migration, the Southern Region followed the Northern Region with MER of -34.5 per cent. In general, the regions showed that there was effective contribution to population distribution by lifetime, as well as recent migration.

Table 7.9 Net migration, gross migration and migration effective ratios for lifetime and recent migration by region

Region	Net migration	In + out-migrants	Migration effectiveness ratio
Lifetime migration			
Eastern	-51,148	298,952	-17.1
Northern	-495,387	622,201	-79.6
Southern	-96,647	280,311	-34.5
Western	643,182	732,284	87.8

Table 7.9 Net migration, gross migration and migration effective ratios for lifetime and recent migration by region (continued)

Region	Net migration	In + out-migrants	Migration effectiveness ratio
Recent migration			
Eastern	-18,197	70,493	-25.8
Northern	-51,564	126,428	-40.8
Southern	-9,273	68,937	-13.5
Western	79,034	160,204	49.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

7.7 International migration

7.7.1 Characteristics of foreign-born population (immigrants)

There were 58,053 persons born outside Sierra Leone in 2015, representing 0.8 per cent of the population (Table 7.10). The proportion of males (56.3 per cent) was higher than females. The sex ratio was 129 males per 100 females, much higher than the national sex ratio. The results also show that 74.4 per cent of the population was within the working age of 15-64 years. The highest proportion (63.9 per cent) of foreign-born people were from Guinea Republic, followed by Liberia (11.9 per cent) and Nigeria (4.9 per cent). The sex composition by country of origin generally shows the same pattern of more male than female immigrants. Liberia is the only country where there were more female immigrants than males (55 per cent compared with 45 per cent).

Table 7.10 Foreign-born population by country of birth

Country of birth	Total	Male	Female	Proportion foreign born
Guinea Republic	37,085	62.2	66.1	63.9
Liberia	6,937	9.5	15.1	11.9
Nigeria	2,851	6.2	3.2	4.9
Gambia	1,737	3.1	2.8	3.0
Rest of African countries	5,249	10.2	7.5	9.0
Non-African countries	4,194	8.7	5.3	7.2
Total		100.0	100.0	100.0
Number	58,053	32,703	25,350	

Source: Statistics Sierra Leone, 2015 Population and Housing Census

An analysis by region and district shows that the proportion of foreign-born population ranged from 0.3 per cent in the Northern Region to 2 per cent in the Western Region. At the district level, 2.2 per cent of the population in Western Urban were foreign-born, while in Bonthe, Moyamba Port Loko and Tonkolili, the proportion was 0.2 per cent or less.

The population born outside Sierra Leone has been declining. The 2004 Census showed that 1.8 per cent of the population was foreign born, compared with 2.9 per cent in 1974 and 2.8 per cent in 1985.

Table 7.11 presents percentage of economically active foreign-born population aged 15 years and over by age, sex and employment status. It is noted that 62.5 per cent of the foreign-born population aged 15 years and over were employed and 3.1 per cent were unemployed. The majority (72.9 per cent) of the foreign-born population was self-employed, 17.1 per cent of the population were in paid employment and apprentices constituted 2.9 per cent.

Of the economically active foreign-born population, 4.7 per cent were unemployed. Analysis of the various employment status categories by age shows that the proportion of the self-employed increased with age. The data also show that the proportion in apprenticeships and unemployment declined with age.

A comparison by sex of the foreign-born population shows that there were more men in paid employment than women (20.2 per cent versus 9.9 per cent). However, slightly more foreign-born women than men were self-employed or unpaid family workers. Even though overall unemployment was higher among foreign-born women, analysis by age shows that after age 39, unemployment among the women was lower than among the men.

Table 7.11 Economically active foreign-born population aged 15 years and over by age, sex and employment status

Sex	Age group	Number	Paid employee	Self-employed	Unpaid family worker	Apprentice	Looking for work
Both sexes	15- 19	1,652	5.7	64.3	6.8	13.7	9.4
	20- 24	3,379	12.5	68.2	3.5	7.0	8.8
	25 - 29	4,767	18.1	70.4	2.2	3.4	6.0
	30 - 34	4,185	20.9	70.8	2.0	1.9	4.4
	35 - 39	4,180	19.9	72.4	2.2	1.5	4.0
	40 - 44	3,190	19.5	74.1	1.8	1.3	3.4
	45 - 49	2,593	18.8	76.1	1.8	1.0	2.3
	50 - 54	2,094	19.5	74.8	2.1	0.7	3.0
	55 - 59	1,308	18.2	77.4	1.3	0.8	2.4
	60 - 64	1,072	14.7	80.9	1.3	1.1	2.0
	65+	1,806	8.5	84.5	3.5	0.9	2.6
	Total	30,226	17.1	72.9	2.5	2.9	4.7

Table 7.11 Economically active foreign-born population aged 15 years and over by age, sex and employment status (continued)

Sex	Age group	Number	Paid employee	Self-employed	Unpaid family worker	Apprentice	Looking for work
Male	15- 19	961	7.8	57.6	5.4	19.6	9.6
	20- 24	1,973	17.6	61.7	2.4	9.8	8.5
	25 - 29	3,000	22.0	66.6	1.2	4.5	5.7
	30 - 34	2,783	25.3	67.3	1.1	2.1	4.2
	35 - 39	2,883	23.6	69.6	1.5	1.6	3.7
	40 - 44	2,329	22.0	71.5	1.3	1.5	3.6
	45 - 49	1,945	22.0	73.6	1.2	0.8	2.4
	50 - 54	1,657	21.2	73.3	1.6	0.8	3.1
	55 - 59	1,083	19.4	76.5	1.0	0.8	2.2
	60 - 64	847	15.6	80.4	0.8	1.2	2.0
	65+	1,499	9.1	84.9	2.9	0.9	2.2
	Total	20,960	20.2	70.3	1.7	3.4	4.3
Female	15 - 19	691	2.7	73.7	8.8	5.6	9.1
	20 - 24	1,406	5.4	77.4	5.0	3.0	9.2
	25 - 29	1,767	11.5	76.8	3.8	1.5	6.3
	30 - 34	1,402	12.2	77.7	3.9	1.4	4.8
	35 - 39	1,297	11.7	78.6	3.8	1.2	4.7
	40 - 44	861	12.7	81.0	2.9	0.8	2.7
	45 - 49	648	9.4	83.6	3.5	1.4	2.0
	50 - 54	437	12.8	80.5	3.9	0.2	2.5
	55 - 59	225	12.4	81.3	2.7	0.4	3.1
	60 - 64	225	11.6	82.7	3.1	0.9	1.8
	65+	307	5.5	82.7	6.5	0.7	4.6
	Total	9,266	9.9	78.5	4.3	1.8	5.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

7.8 Urbanization

Urbanization can indicate a situation existing at any moment, in which instance it is best to speak of a level of urbanization; or it can be used to express the trend of urban developments, in which instance it is better to speak of the tempo of urbanization (UN, 1970). Urban areas in Sierra Leone are defined as localities with a minimum threshold of 2,000 persons, a criterion developed by Statistics Sierra Leone. This definition of urban was used during the previous census in 2004.

7.9 Levels and trends of urbanization

7.9.1 Proportion of urban population

Out of the 7,092,113 persons enumerated in Sierra Leone, 2,905,097 or 41 per cent were in the urban areas, while 59 per cent were in the rural areas (Table 7.12). At the regional level, the Western Region was predominantly urban with 97.1 per cent of the population in urban areas. The Eastern Region had the next highest proportion of urban population (33.4 per cent), followed by the Northern Region (24.5 per cent) and the Southern Region (19.6 per cent). The results further show that the Western Region constituted half of the total urban population in Sierra Leone. The Southern Region only had 10 per cent of its population in urban areas compared to 19 per cent in the Eastern Region and 21 per cent in the Northern Region.

At the district level, Western Urban was totally urban and Western Rural also had a high urban population (90.2 per cent). Among the rest of the districts, the urban population ranged from 7.1 per cent in Moyamba to 44.5 per cent in Kenema. Regarding the cities, Freetown in the Western Region had the largest population of 1,055,964; Kenema in the Eastern Region had a population of 200,443; Bo in the Southern Region had a population of 174,369; and Makeni in the Northern Region had the smallest population of 124,634.

The urban population has been increasing over the years. The 2004 Census showed that 36.7 per cent of the population were in urban areas, an increase from 27.6 per cent in 1974 to 32.2 per cent in 1985.

Table 7.12 Urban population by sex, region and district

Region/district	Region/district				
	Total	Male	Female	Sex Ratio	Percent Urban
Eastern	548,722	270,397	278,325	0.98	33.4
Northern	612,015	300,310	311,705	0.99	24.5
Southern	282,543	137,080	145,463	0.98	19.6
Western	1,450,227	722,256	727,971	0.99	97.1

Table 7.12 Urban population by sex, region and district (continued)

Region/district	Region/district				
	Total	Male	Female	Sex Ratio	Percent Urban
Kailahun	153,102	74,930	78,172	0.97	29.1
Kenema	271,321	133,560	137,761	0.96	44.5
Kono	124,299	61,907	62,392	0.97	24.6
Bombali	172,597	85,168	87,429	0.96	28.5
Kambia	100,479	48,480	51,999	0.97	29.2
Koinadugu	73,035	36,275	36,760	0.93	17.9
Port Loko	158,657	77,336	81,321	0.99	25.9
Tonkolili	107,247	53,051	54,196	0.95	20.2
Bo	194,017	93,708	100,309	0.94	33.8
Bonthe	37,975	18,821	19,154	0.93	18.9
Moyamba	22,469	10,601	11,868	0.98	7.1
Pujehun	28,082	13,950	14,132	0.89	8.1
Western Rural	399,516	198,375	201,141	0.99	90.2
Western Urban	1,050,711	523,881	526,830	0.99	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

7.9.2 Trends in urban growth rate

The urban growth rate is an important indicator in measuring urbanization as it reflects the expansion of urban areas. Table 7.13 presents trends in urbanization from 1974 to 2015. The intercensal urban growth rate between 2004 and 2015 was 4.2 per cent. This is much higher than the rural growth rate of 2.6 per cent for the same period. The urban growth rate also exceeded the national population growth rate which was estimated at 3.2 per cent for the period 2004-2015.

The growth rate has been increasing over the years as the urban growth rate was 3.7 per cent between 1974 and 1985. However, the urban growth rate slowed down to 2.5 per cent between 1985 and 2004, the period of the Civil War. Among the cities, Makeni was the fastest growing city with an annual growth rate of 3.7 per cent compared with 2.8 per cent for Freetown.

To measure the tempo of urbanization it is advisable to take the difference between the urban and rural growth rates. Based on this, the tempo of urbanization in Sierra Leone was 1.6 per cent. Compared to 2004, the tempo was 1.0 per cent meaning that the rate of change of urbanization was slower between 1985 and 2004 than 2004 to 2015.

Table 7.13 Trends in urbanization, 1974-2015

Census year	Urban population	Proportion urban	Annual growth rate
1974	756,126	27.6	-
1985	1,133,773	32.2	3.7
2004	1,825,246	36.7	2.5
2015	2,905,097	40.1	4.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

7.9.3 Urban-rural ratio

The urban-rural ratios presented in Table 7.14 shows that in Sierra Leone, the ratio was 0.69, an increase from 0.58 in 2004. This means that for every 69 persons in urban areas, there were 100 persons in rural areas. At the regional level, the urban-rural ratio ranged from 0.24 in the Southern Region to 33.3 in the Western Region. Since the Western Region is predominantly urban, a ratio above 1 is expected. At the district level, Moyamba and Pujehun had the lowest urban-rural ratios, 0.08 and 0.09 respectively.

Table 7.14 Urban-rural ratio by region and district

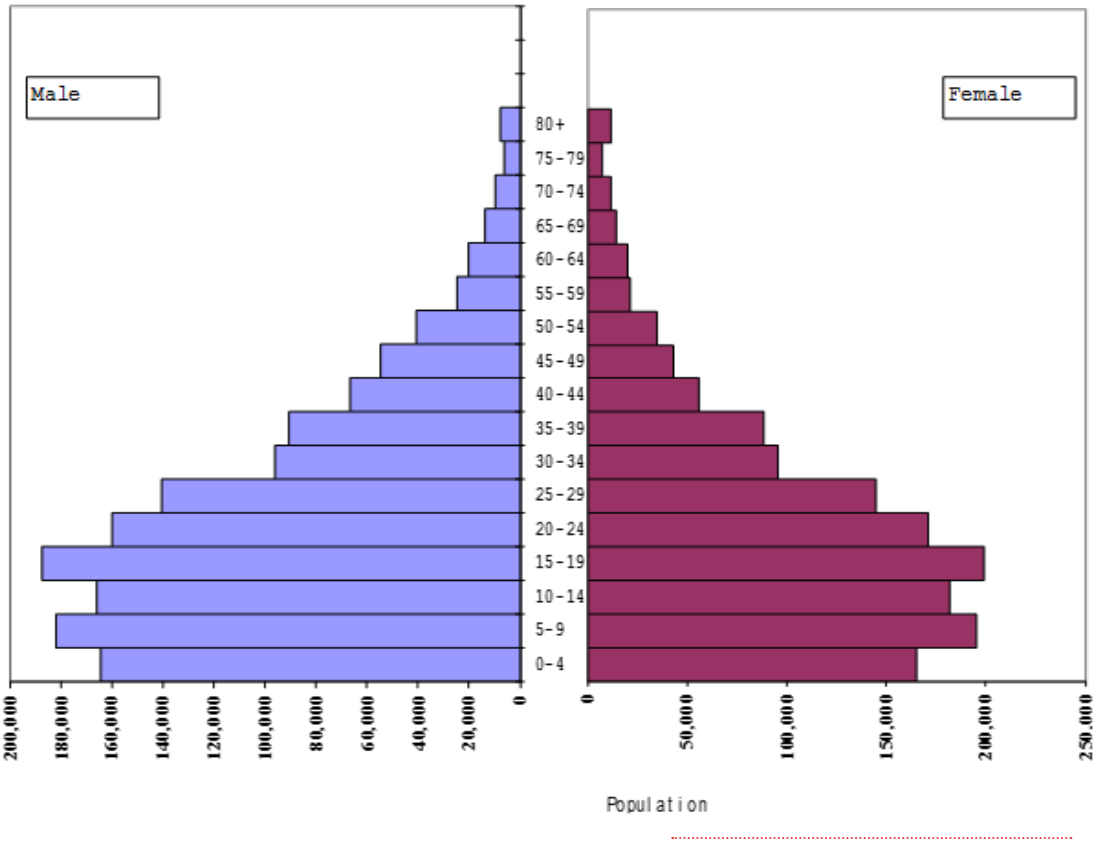
Region/district	Urban-rural ratio
Total	0.69
Region	
Eastern	0.50
Northern	0.32
Southern	0.24
Western	33.30
District	
Kailahun	0.41
Kenema	0.80
Kono	0.33
Bombali	0.40
Kambia	0.41
Koinadugu	0.22

Table 7.14 Urban-rural ratio by region and district (continued)

Region/district	Urban-rural ratio
Port Loko	0.35
Tonkolili	0.25
Bo	0.51
Bonthe	0.23
Moyamba	0.08
Pujehun	0.09
Western Rural	9.17
Western Urban -	0.41

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Figure 7.1 Pyramid for the urban population



Source: Statistics Sierra Leone, 2015 Population and Housing Census

7.10 Summary, conclusion and recommendations

7.10.1 Summary and conclusion

The results show that 84.6 per cent of the population did not move from their district of birth. The regional comparison shows that most non-movers were in the Northern Region (2,418,215) while the Western Region had the lowest number of non-movers (750,136). The recent migration rates show that the Western Region continued to receive people from the other regions with a net migration of 79,034.

All the other regions experienced a net loss of people. There were 58,053 persons born outside Sierra Leone representing 0.8 per cent of the population. Most of these lifetime migrants were born in Guinea Republic and there were more males than females.

The urban growth rate shows that the urban population was growing at a faster rate than the rural population (4.2 per cent compared with 2.6 per cent). The dependent population aged below 15 years and 64 years and above was around 40 per cent, which is slightly lower than the national dependency rate at 44 per cent.

In terms of size, the urban population was largest in the Western Region. The ratio of urban to rural population was 0.69, an increase from 0.58 in 2004, and this shows that the urban population is increasing in Sierra Leone.

Migration within the country continues. It is likely that people will continue to migrate to urban areas in the next few years, especially into the Western Region. The fertility rate in the Western Region is lower than the other regions but its population continues to grow.

7.10.2 Recommendations

There is need for the Government to plan for the increasingly young population and put in place more education infrastructure, especially primary schools. There will also be an increased need for health services for both children and adults.

The Government should ensure that people in urban areas have a decent standard of living, by creating more economic opportunities. More importantly, it must keep up with the increase in demand for housing as the population size increases in urban areas. Already there are many apartments in Western Urban district where multiple households can stay in one building. This is a good way to maximise space in such an overpopulated urban area, rather than building separate structures for each household. The Government should encourage the building of such types of housing arrangements.

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CHAPTER 8 : MARITAL CHARACTERISTICS

8.1 Introduction

Many non-African cultures define marriage as a union of two persons of the opposite sex. However, this definition is not directly applicable in the African context. Marriage in Africa is a 'developing process', rather than an event at a point in time marking the cohabitation of husband and wife. There are variations between and within cultures and marriage can be formal or informal, depending on the norms of a particular society. It is not mandatory in Sierra Leone, except in some circumstances where marriage is expected, for instance for clergy, chiefs or politicians. But legally-speaking marriage is not compulsory.

In spite of the definitional problems of marriage in Sierra Leonean society, it is seen as the main socially-sanctioned institution for couples wishing to have children. An individual's role in society is, to a large extent, dependent on their marital status. However, this does not mean that pre-marital births do not occur.

Marital status composition has also been recognized as the most important factor in population dynamics affecting fertility and, to a lesser extent, mortality and migration. Its effect is also felt on other socio-economic phenomenon such as school attendance, family formation, households, and other labour force participation in late adolescent and young adult age groups.

The importance of the institution of marriage in Serra Leone lies in the fact that it incorporates all the social, economic, legal, cultural and other factors that society considers vital for its existence. It is therefore seen as an integral part of the socio-economic and cultural cycle through which everyone is expected to pass, because it upholds certain norms which every member should observe. The violations of such prohibitive norms such as incest or cross-cousin marriages are expiated according to the prescribed norms of the ethnic group in question.

The types of marriage are:

(a) traditional or cultural marriages are contracted based on the various traditions of the people concerned. These can be registered at local council level to make them legally binding;
(b) Christian and Muslim marriages. These can also be registered;
(c) civil or registry marriage; and
(d) cohabitation for five years and above. This is actually not a marriage in the strict sense but it is part of the constitution that if people cohabit for that period of time then they are considered to be husband and wife. In such cases, the woman is entitled to benefit from whatever the man possesses if he dies, or she is liable to compensation if he abandons her. It is designed to protect women from abuse by men.

In most cases, people marry as adults. However, there are also exceptional cases of child marriages.

8.2. Sources of data

The question on marital status in the 2015 Census to all persons aged at least 10 years was: 'What is (Name)'s current marital status?'. The marital status categories are: never married

i. engaged
ii. married monogamous
iii. married polygamous
iv. co-habitation – less than 5 years
v. co-habitation – 5 years or more
vi. separated
vii. divorced
viii. widowed
ix. don't know

All these categories were clearly defined for the interviewers.

It should be noted that the marital status categories used in the 1985 Census were not the same as those used for this census. The 1985 marital status categories were:

i. never married
ii. married
iii. separated
iv. divorced
v. widowed
vi. not stated

For comparative purposes the following categories were used:

1985	2015
Never married	Never married, engaged
Married	Married monogamous, polygamous, cohabitation
Separated	Separated
Divorced	Divorced
Widowed	Widowed
Not stated	Not stated

It is worth noting that polygamy, in the Sierra Leonean sense, is actually polygyny – that is, the spouse who has more than one mate is always a man. Polyandry, where a woman has more than one mate, is not sanctioned.

It should also be noted that, for females, no information was collected on age at first marriage, re-marriage, number of times married, nor age at first live birth.

This analysis looks at marital status categories to see how these are influenced by the socio-economic characteristics of the target population under examination. These characteristics include, among others, age groups, sex, place of residence (urban or rural areas), different religious groups, employment status and economic activity. Comparisons with data from previous censuses should be handled with care, because, as already observed, the marital status categories are not the same.

8.3. Marital status for the population aged 10 years and above by residence, region and district

The proportion of the population never married is the highest in the country with 46 per cent. This ranges from 43 per cent in the Northern Region to 55 per cent in the Southern Region (Table 8.1). Married polygamous follows with 30 per cent, ranging from 22 per cent in the Southern Region to 32 per cent in the Northern Region. The monogamously married category follows with proportions ranging from 9 to 16 per cent respectively in the Northern and Western regions. The pattern is not the same across all of the regions.

There are notable differences between rural and urban areas. The proportions never married are 41 and 52 per cent respectively for the rural and urban areas. The proportions in polygamous unions are 34 and 25 per cent respectively for the two areas. The proportion widowed ranges between 3 and 4 per cent for the total country, rural and urban areas, as well as regions. The proportion separated is less than 2 per cent for the total country, rural and urban areas, as well as for the regions. With regard to the divorced population, the proportions are 1 per cent or less in all areas.

Table 8.1 Percentage distribution of the population aged 10 years and above by marital status, residence and region

Place of Residence/ Region	Total	Marital status				
		Never Married	Engaged	Married Monogamous	Married Polygamous	Co-habitation (< 5 years)
All Residence						
Total	5 030 016	45.9	4.0	13.0	30.0	0.4
Eastern	1 167 420	46.0	3.0	12.3	31.4	0.5
Northern	1 709 916	43.1	3.1	15.5	31.7	0.3
Southern	1 001 795	55,2	4.8	10.9	22.4	0.6
Western	1 150 885	52.5	7.0	9.0	24.7	0.4
Rural						
Total	2 843 126	41.2	3.0	14.9	33.7	0.4
Eastern	761 186	46.0	3.0	12.3	31.4	0.5
Northern	1 262 168	43.2	3.4	13.9	31.8	0.5
Southern	788 288	43.2	3.4	13.9	31.8	0.5
Western	31 484	52.5	7.0	9.0	24.7	0.4
Urban						
Total	2 186 890	52.1	5.4	10.4	25.3	0.5
Eastern	406 234	51.1	3.5	11.1	27.7	0.5
Northern	447 748	40.7	2.9	16.2	33.6	0.2
Southern	213 507	55.2	4.8	10.9	22.4	0.6
Western	1119401	52.8	7.0	8.9	24.6	0.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 8.1 Percentage distribution of the population aged 10 years and above by marital status, residence and region (continued)

Place of Residence/ Region	Marital status					Total %
	Co-habitation (= >5 years)	Separated	Divorced	Widowed	Don't know	
All Residence						
Total	0.2	1.4	0.8	4.0	0.3	100.0
Eastern	0.2	1.4	0.7	4.1	0.3	100.0
Northern	0.1	1.1	0.8	4.1	0.3	100.0
Southern	0.3	1.1	0.7	3.7	0.3	100.0
Western	0.2	1.6	1.0	3.2	0.4	100.0
Rural						
Total	0.1	1.3	0.7	4.4	0.3	100.0
Eastern	0.2	1.4	0.7	4.1	0.3	100.0
Northern	0.2	1.3	0.7	4.5	0.4	100.0
Southern	0.2	1.3	0.7	4.5	0.4	100.0
Western	0.2	1.6	1.0	3.2	0.4	100.0
Urban						
Total	0.2	1.4	0.9	3.4	0.3	100.0
Eastern	0.3	1.2	0.6	3.7	0.4	100.0
Northern	0.1	1.2	0.7	4.2	0.2	100.0
Southern	0.3	1.1	0.7	3.7	0.3	100.0
Western	0.2	1.6	1.0	3.2	0.4	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

In general, the marital status pattern for the districts follows the national one (Table 8.2). The proportions never married dominate across all districts, ranging from 36 to 55 per cent in Moyambe and Western Area Urban districts respectively. The latter is the only district where the proportion never married exceeds 50 per cent. This district also has the lowest proportion, 8 per cent, of monogamous marriages. Polygamous marriages range from 23 per cent in Western Area Urban to 37 per cent in Moyambe. The district of Konaidugu has the lowest proportion of widowed marriages at 2 per cent, while Moyambe has the highest proportion at 6 per cent.

Table 8.2 Percentage distribution of the population aged 10 years and above by district, marital status and sex

District	Marital status								
	Never Married			Engaged			Married Monogamous		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total Country	45.9	53.1	39.1	8.3	3.7	4.4	13.0	9.8	15.9
Kailahun	47.8	54.4	41.4	7.6	3.5	4.0	12.2	10.5	13.9
Kenema	44.2	50.5	37.9	5.9	2.6	3.2	12.2	9.8	14.5
Kono	46.3	52.0	40.5	4.9	2.3	2.6	12.7	10.9	14.5
Bombali	45.4	54.2	37.2	7.2	3.0	3.9	12.5	9.1	15.7
Kambia	39.7	50.4	30.4	6.7	2.6	3.6	17.2	11.2	22.4
Koinadugu	48.9	57.1	40.8	4.4	2.0	2.3	15.3	10.7	19.8
Port Loko	39.7	48.5	32.0	5.7	2.3	3.0	17.8	11.0	23.8
Tonkolili	41.9	50.3	33.9	8.2	3.5	4.5	15.1	11.0	19.1
Bo	45.4	52.2	39.0	8.9	3.9	4.7	12.8	10.2	15.3
Bonthe	41.8	48.4	35.6	6.5	2.9	3.4	15.3	12.6	17.9
Moyamba	36.1	44.6	28.5	5.8	2.4	3.0	14.7	11.7	17.4
Pujehun	46.9	53.6	40.6	5.2	2.3	2.8	14.3	11.5	16.9
Western Area Rural	46.7	52.5	40.9	14.4	6.7	7.7	11.0	8.8	13.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 8.2 Percentage distribution of the population aged 10 years and above by district, marital status and sex (continued)

District	Marital Status								
	Married Polygamous			Co-habitation (< 5 years)			Co-habitation (= >5 years)		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total Country	30.0	29.8	30.3	0.4	0.4	0.5	0.2	0.1	0.2
Kailahun	28.6	27.9	29.3	0.4	0.4	0.5	0.2	0.1	0.2
Kenema	33.5	32.8	34.3	0.5	0.5	0.6	0.2	0.2	0.3
Kono	31.6	30.8	32.5	0.5	0.4	0.6	0.1	0.1	0.2
Bombali	31.1	30.6	31.5	0.4	0.3	0.4	0.1	0.1	0.2
Kambia	33.8	33.6	33.9	0.1	0.1	0.2	0.1	0.0	0.1
Koinadugu	29.8	27.9	31.6	0.1	0.1	0.1	0.0	0.0	0.0
Port Loko	32.4	35.4	29.8	0.3	0.2	0.3	0.1	0.1	0.1
Tonkolili	31.8	31.9	31.7	0.3	0.3	0.4	0.1	0.1	0.1
Bo	29.6	29.6	29.7	0.6	0.5	0.7	0.2	0.2	0.3
Bonthe	32.8	32.5	33.0	0.5	0.4	0.6	0.2	0.2	0.2
Moyamba	37.1	37.0	37.1	0.5	0.4	0.6	0.2	0.1	0.2
Pujehun	30.2	29.4	30.8	0.5	0.5	0.5	0.2	0.1	0.2
Western Area Rural	28.5	28.3	28.6	0.5	0.4	0.5	0.2	0.2	0.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 8.2 Percentage distribution of the population aged 10 years and above by district, marital status and sex (continued)

District	Marital status								
	Separated			Divorced			Widowed		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total Country	1.4	1.2	1.5	0.8	0.6	0.9	4.0	0.9	7.0
Kailahun	1.6	1.3	1.8	0.7	0.6	0.8	4.5	1.1	7.9
Kenema	1.3	1.4	1.2	0.6	0.6	0.6	4.1	1.0	7.1
Kono	1.4	1.4	1.3	0.8	0.8	0.8	3.8	1.0	6.7
Bombali	1.2	1.0	1.4	0.8	0.6	0.9	4.9	0.8	8.6
Kambia	1.0	0.7	1.2	0.8	0.6	0.9	4.0	0.5	7.0
Koinadugu	0.8	0.7	0.9	0.4	0.3	0.4	2.2	0.6	3.7
Port Loko	1.3	0.9	1.6	0.9	0.7	1.2	4.6	0.7	8.0
Tonkolili	1.3	1.1	1.5	0.9	0.7	1.0	4.3	0.9	7.6
Bo	1.3	1.3	1.3	0.7	0.7	0.8	4.6	1.0	8.0
Bonthe	1.2	1.0	1.4	0.6	0.5	0.7	4.1	1.1	6.9
Moyamba	1.8	1.5	2.0	0.8	0.6	0.9	5.8	1.2	9.9
Pujehun	1.1	0.9	1.2	0.5	0.5	0.6	3.6	0.8	6.2
Western Area Rural	1.5	1.2	1.7	0.9	0.7	1.1	3.2	0.7	5.7

Source: Statistics Sierra Leone, 2015 Population and Housing Census

8.4. Marital status for the population aged 10 years and above by age group and sex

The proportion of the population never married is the most dominant marital category with 46 per cent, followed by polygamous marriages with 30 per cent and monogamous marriages at 13 per cent (Table 8.3). The proportion never married declines as people grow older, from 95 per cent in age group 10-14 years to 9 per cent in age group 35-39 years. On the other hand, widowhood increases with age from 7 per cent in age group 45-49, to 38 per cent for those aged 75 years and above.

Table 8.3 Percentage distribution of the population aged 10 years and above by marital status and age group

Age Group	Marital status (percent)					
	Total Population	Never Married	Engaged	Married Monogamous	Married Polygamous	Co-habitation (< 5 years)
Total Country	5 030 016	45.9	4.0	13.0	30.0	0.4
10 - 14	846 137	96.5	0.4	1.3	0.6	0.3
15 - 19	871 348	85.5	2.3	5.8	4.7	0.5
20 - 24	660 438	58.8	5.9	13.4	19.1	0.8
25 - 29	605 621	33.6	7.5	18.7	36.4	0.7
30 - 34	432 373	16.9	7.2	21.8	48.6	0.5
35 - 39	419 485	8.9	6.0	20.0	58.4	0.3
40 - 44	297 997	5.6	4.8	19.9	60.0	0.2
45 - 49	241 362	3.9	3.9	18.0	62.6	0.2
50 - 54	186 285	3.5	3.1	18.2	58.6	0.1
55 - 59	110 200	2.9	2.7	17.1	57.0	0.1
60 - 64	112 486	2.7	2.2	16.9	50.7	0.1
65 - 69	73 617	2.4	2.0	15.4	49.1	0.1
70 - 74	65 495	2.7	1.7	14.9	43.1	0.1
75 +	107 172	3.3	1.4	13.3	38.7	0.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 8.3 Percentage distribution of the population aged 10 years and above by marital status and age group (continued)

Age group	Marital status (percent)					Total %
	Co-habitation (= >5 years)	Separated	Divorced	Widowed	Don't know	
Total Country	0.2	1.4	0.8	4.0	0.3	100.0
10 - 14	0.0	0.1	0.0	0.1	0.7	100.0
15 - 19	0.2	0.2	0.1	0.2	0.5	100.0
20 - 24	0.3	0.7	0.3	0.4	0.3	100.0
25 - 29	0.3	1.3	0.6	0.7	0.2	100.0
30 - 34	0.3	2.1	1.0	1.5	0.1	100.0
35 - 39	0.2	2.4	1.3	2.5	0.1	100.0
40 - 44	0.1	2.9	1.6	4.7	0.1	100.0
45 - 49	0.1	2.8	1.7	6.7	0.1	100.0
50 - 54	0.1	2.9	2.0	11.4	0.1	100.0
55 - 59	0.1	3.0	2.1	14.9	0.1	100.0
60 - 64	0.1	2.8	2.1	22.3	0.2	100.0
65 - 69	0.1	2.7	2.2	25.8	0.2	100.0
70 - 74	0.1	2.6	2.2	32.3	0.3	100.0
75 +	0.1	2.3	2.1	38.3	0.4	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

An attempt has been made to make some comparisons with the 1985 Census (Table 8.4). However, the data available are for females only. There are notable differences between 1985 and 2015. The proportion never married has doubled from 22 to 43 per cent. The proportion married, which is made up of married monogamous, polygamous and cohabitation, has declined from 67 to 47 per cent respectively between 1985 and 2015. The proportions separated, divorced or widowed have remained constant during the period of the two censuses with respective percentages of 2, 1 and 7.

Table 8.4 Percentage distribution of marital status for females aged 10 years and above by age group, total country, 1985 and 2015 Censuses

Age Group	Marital Status											
	Never married, engaged		Married monogamous, polygamous or cohabitation		Separated		Divorced		Widowed		Don't know	
	2015	1985	2015	1985	2015	1985	2015	1985	2015	1985	2015	1985
All age groups	43	22	47	67	2	2	1	1	7	8	0	1
10 - 14	97	90	3	7	0	0	0	0	0	0	0	2
15 - 19	81	40	18	58	0	1	0	0	0	0	0	1
20 - 24	49	15	49	81	1	2	0	1	1	1	0	1
25 - 29	28	7	69	89	2	2	1	1	1	1	0	1
30 - 34	16	4	78	90	2	2	1	1	2	2	0	1
35 - 39	11	3	81	90	3	2	1	1	4	3	0	1
40 - 44	8	2	78	87	3	3	2	1	9	6	0	1
45 - 49	6	2	75	83	3	3	2	1	13	10	0	1
50 - 54	6	2	66	76	3	3	2	1	22	17	0	1
55 - 59	5	2	59	69	3	3	3	2	29	24	0	1
60 - 64	5	2	51	61	3	3	2	1	39	32	0	1
65 - 69	4	2	44	40	3	2	3	1	47	53	0	1
70 - 74	4	..	35	..	2	..	2	..	55	..	0	..
75 +	5	..	27	..	2	..	2	..	64	..	0	..

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 8.5 presents selected marital status categories by age and sex. These categories are never married, polygamous and widowed. They make up 80 per cent of all marital categories. These categories appear to have significantly different patterns by age. For the never married category, the proportions for males and females are 44 and 39 per cent respectively. However, there are significant differences in the trend by age. For the 10-14 year age group, the percentages never married are 97 and 96 respectively for both males and females. However, the trend by age group differs significantly for the two sexes. By age group 20-24 the respective proportions are 79 and 41 per cent. At age group 25-29 the proportions never married have declined to 50 and 41 per cent respectively, an indication that females get married at a faster rate than males. By age group 45-49 the gap has narrowed to 4.5 and 3.2 per cent respectively for the two sexes.

By the age of 75, the proportions never married have declined to 3.0 and 3.5 per cent respectively for males and females. There are notable sex differences in polygamous unions with more men (36 per cent) than women (30 per cent) involved in such unions. It can be observed in the table that such unions commence at relatively earlier ages for women than for men. By age group 25-29 the proportions of married women and men in polygamous unions are 47 and 24 per cent respectively.

The proportion of married men in polygamous unions keeps on rising from 24 per cent in age group 25-29 to 75 per cent in age group 55-59 and then declines to 70 per cent by the age of 70. In the case of women, the proportion of married women in polygamous unions keeps on rising from 24 per cent in age group 25-29 to 58 per cent in age group 35-39 and then starts declining to 12 per cent by the age of 75. Such a decline for the women may be attributable to relatively higher male mortality at older ages.

It can further be observed in Table 8.5 that widowhood for women is relatively higher than that for men across all age groups. The overall proportion of widows is 7 per cent of all marital status categories compared to 1 per cent for widowers. At age group 40-44 the proportions of widows and widowers are respectively 9 and 1 per cent. By age group 75+ the corresponding percentages are 64 and 9 respectively for women and men. As mentioned earlier, this may be due to men having a lower life expectancy.

At district level, widowhood ranges from 2 to 6 per cent for the districts of Koinadugu and Moyambe respectively (Table 8.6). Polygamous unions dominate in all the districts, with proportions ranging from 23 to 37 per cent respectively in the districts of Western Area Urban and Moyambe.

Table 8.5 Percentage distribution of selected marital status categories by age group and sex

Selected marital statuses (Percent)						
Age Group	Never married		Married polygamous		Widowed	
	Male	Female	Male	Female	Male	Female
Total	43.8	39.1	36.0	30.3	1.0	7.0
10 - 14	96.9	96.0	0.5	0.7	0.1	0.2
15 - 19	94.3	77.1	0.8	8.4	0.1	0.3
20 - 24	79.2	41.2	6.4	30.1	0.2	0.6
25 - 29	50.1	19.8	24.0	46.8	0.3	1.1
30 - 34	25.2	9.9	42.8	53.5	0.5	2.4
35 - 39	12.5	5.6	59.2	57.6	0.6	4.1
40 - 44	7.1	4.0	66.0	53.7	1.0	8.7
45 - 49	4.5	3.2	72.4	50.6	1.3	13.3
50 - 54	3.8	3.1	72.7	42.7	2.0	22.1
55 - 59	2.8	3.0	74.7	36.4	2.4	29.4
60 - 64	2.5	2.8	74.0	29.3	3.8	39.2
65 - 69	2.2	2.7	74.8	24.1	4.3	46.8
70 - 74	2.3	3.0	72.3	17.6	6.0	55.3
75 +	3.0	3.5	69.5	12.0	8.9	63.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 8.6 Percentage distribution of selected marital status categories by district and sex

District	Married Monogamous			Married Polygamous			Widowed		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total Country	13.0	9.8	15.9	30.0	29.8	30.3	4.0	0.9	7.0
Kailahun	12.2	10.5	13.9	28.6	27.9	29.3	4.5	1.1	7.9
Kenema	12.2	9.8	14.5	33.5	32.8	34.3	4.1	1.0	7.1
Kono	12.7	10.9	14.5	31.6	30.8	32.5	3.8	1.0	6.7
Bombali	12.5	9.1	15.7	31.1	30.6	31.5	4.9	0.8	8.6
Kambia	17.2	11.2	22.4	33.8	33.6	33.9	4.0	0.5	7.0
Koinadu-gu	15.3	10.7	19.8	29.8	27.9	31.6	2.2	0.6	3.7
Port Loko	17.8	11.0	23.8	32.4	35.4	29.8	4.6	0.7	8.0
Tonkolili	15.1	11.0	19.1	31.8	31.9	31.7	4.3	0.9	7.6
Bo	12.8	10.2	15.3	29.6	29.6	29.7	4.6	1.0	8.0
Bonthe	15.3	12.6	17.9	32.8	32.5	33.0	4.1	1.1	6.9
Moyamba	14.7	11.7	17.4	37.1	37.0	37.1	5.8	1.2	9.9
Pujehun	14.3	11.5	16.9	30.2	29.4	30.8	3.6	0.8	6.2
Western Area Rural	11.0	8.8	13.1	28.5	28.3	28.6	3.2	0.7	5.7
Western Area Urban	8.2	6.7	9.7	23.2	22.9	23.5	3.2	0.8	5.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

8.4.1. Age at marriage for females

Age at marriage, length of marriage and the proportion who ultimately marry, affects the fertility level of the population. A woman's age at first entry into unions has been used as an approximate indicator of her exposure to the risk of child bearing. Early child marriages, which occur in most African cultures, take place soon after puberty.

The singulate mean age at marriage (SMAM) measures the mean number of years spent in a single state among women who ultimately marry. It measures the mean age at marriage among those females who ever marry, by some pre-defined age limit. It is assumed that the mean age at marriage is equal to the mean duration of single life. The latter can be calculated from the proportion of single persons at successive ages, if there have been no changes of age patterns of marriage in the recent past and if differential mortality and net migration rates by marital status may be considered negligible. Under these conditions, a cohort moving through life would have the same proportion single at successive ages as persons at the same ages in the present population.

Table 8.7 presents the female SMAM for the whole country by residence, region and districts for the 1985 and 2015 Censuses. It can be observed that, for the total country, the SMAM has gone up from 18 to 22 years, indicating that women are generally marrying later. Regionally, the SMAM ranged from 22 to 27 years respectively for the Northern and Western regions. There are no comparable figures from the previous census.

With regard to the districts, the 1985 SMAMs ranged from 17 to 22 years for the districts of Kambia and Western Area Rural. The SMAMs have gone up in all the districts between 1985 and 2015. The age of entry into a marital union has gone up by about 4 years.

Table 8.7 Singulate Mean Age at Marriage (SMAM) for females, total country, residence, region and district, 2015 and 1985

Area	SMAG	
	2015	1985
Total Country	22.3	18.0
Urban	21.0	..
Rural	24.0	..
Regions		
Eastern	24.7	..
Northern	22.2	..
Western	27.2	..
Southern	24.1	..
Districts		
Kailahun	22.8	17.1
Kenema	21.8	17.0
Kono	22.1	..
Bombali	24.9	17.6
Kambia	20.1	16.9
Konaidugu	22.0	17.4
Port Loko	20.6	17.2
Tonkolili	20.7	17.5
Bombali	22.5	17.6
Bonthe	28.3	17.3
Moyamba	22.5	17.8
Pujuhun	24.3	17.1
Western Area Rural	22.5	22.5
Western Area Urban	25.4	20.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census
Analytical Report: Chapter 4, 1985 Population and Housing Census, Sierra Leone

8.5 Marital status and employment status

The percentage distribution of the population aged 10 years and above by marital status and employment status is presented in Table 8.8. For the country as a whole, 43 per cent of the population are self-employed without other employees, followed by full-time students at 30 per cent. In the never married group, 61 per cent are full-time students. It can further be observed that self-employment dominates in both the monogamous and polygamous groups with proportions of over 60 per cent in each group. Table 8.9 present marital status categories by selected employment status categories. These are paid employees, self-employed, household work and full-time students. These together make up 85 per cent of all the employees. There is a clear dominance of the self-employed without employees and the full-time student groups.

Table 8.8 Percentage distribution of the population aged 10 years and above by marital status and employment status

	Marital Status					
Employment Status	Total	Never Married	Engaged	Married Monogamous	Married Polygamous	Co-habitation (< 5 years)
Total Country	5 030 016	2 310 448	203 010	651 433	1 511 418	20 541
Paid employee	0.0	0.0	0.0	0.0	0.0	0.1
Self-employed without employees	0.0	0.0	0.0	0.0	0.0	0.2
Self-employed with employees (employer)	0.0	0.0	0.0	0.0	0.0	0.2
Unpaid family worker	0.0	0.0	0.0	0.0	0.0	0.1
Paid apprentice	0.0	0.0	0.0	0.0	0.0	0.2
Unpaid apprentice	0.0	0.0	0.0	0.0	0.0	0.2
Worked before but currently looking for work	0.0	0.0	0.0	0.0	0.0	0.1
Looking for work for the first time	0.0	0.0	0.0	0.0	0.0	0.1
Household work	0.0	0.0	0.0	0.0	0.0	0.1
Not working & not looking for work	0.0	0.0	0.0	0.0	0.0	0.0
Full time student	0.0	0.0	0.0	0.0	0.0	0.0
Retired/pensioner	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0
Don't know	0.0	0.0	0.0	0.0	0.0	0.0
Total Percent)	0.0	0.0	0.0	0.0	0.0	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 8.8 Percentage distribution of the population aged 10 years and above by marital status and employment status (continued)

	Marital Status				
Employment Status	Co-habitation (= >5 years)	Separated	Divorced	Widowed	Don't know
Total Country	8 739	67 932	39 191	200 984	16 320
Paid employee	0.3	0.0	0.0	0.0	0.0
Self-employed without employees	0.4	0.0	0.0	0.0	0.0
Self-employed with employees (employer)	0.4	0.0	0.0	0.0	0.0
Unpaid family worker	0.3	0.0	0.0	0.0	0.0
Paid apprentice	0.4	0.0	0.0	0.0	0.0
Unpaid apprentice	0.4	0.1	0.0	0.0	0.0
Worked before but currently looking for work	0.3	0.0	0.0	0.0	0.0
Looking for work for the first time	0.3	0.0	0.0	0.0	0.0
Household work	0.3	0.0	0.0	0.0	0.0
Not working & not looking for work	0.0	0.0	0.0	0.0	0.0
Full time student	0.0	0.0	0.0	0.0	0.0
Retired/pensioner	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0
Don't know	0.0	0.0	0.0	0.0	0.0
Total Percent)	3.1	0.4	0.0	0.0	0.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 8.9 Percentage distribution of marital status categories by selected employment status categories

Employment Status	Marital Status					
	Total	Never Married	Engaged	Married Monogamous	Married Polygamous	Co-habitation (< 5 years)
Paid employee	5.5	2.7	10.7	7.4	8.2	6.3
Self-employed without employees	42.5	19.3	51.7	63.0	66.1	37.0
Household work	6.8	4.2	9.2	8.8	8.7	10.1
Full time student	30.0	61.3	8.6	4.1	1.8	27.4
Total	84.8	87.5	80.3	83.3	84.8	80.8
Paid apprentice	0.0	0.0	0.0	0.0	0.0	0.2
Unpaid apprentice	0.0	0.0	0.0	0.0	0.0	0.2

Employment Status	Marital Status				
	Co-habitation (= >5 years)	Separated	Divorced	Widowed	Don't know
Paid employee	10.1	8.5	8.9	3.2	2.3
Self-employed without employees	39.0	60.5	56.8	49.8	18.5
Household work	9.3	7.6	8.2	13.8	4.3
Full time student	19.3	2.7	2.2	1.1	50.5
Total	77.8	79.3	76.1	67.9	75.5
Paid apprentice	0.0	0.0	0.0	0.0	0.0
Unpaid apprentice	0.0	0.0	0.0	0.0	0.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

8.6 Marital status and religion

Religion plays a big role in influencing a person's type of marriage. For example, Christian beliefs do not accept polygamous marriages, while Moslem beliefs embrace them. However, these norms are not strictly followed in African countries.

Tables 8.10 a and b present the distribution of the population aged 10 years and above by marital status and religion. Table 8.10a shows that the dominant religion is Islam with 76 per cent of the population aged 10 years and above. The percentage of the population belonging to all Christian faiths is 23. The same trend can be observed for all marital status categories where Islam dominates, ranging from 65 per cent for those who have co-habited for more than 5 years to 80 per cent for those married monogamously.

Table 8.11 presents the distribution of selected marital status categories by religion. These are never married, monogamous, polygamous and widowed. They are all dominated by Moslems, where the proportions range from 72 to 80 per cent. There are no notable differences between men and women in the selected marital categories.

Table 8.10a Percentage distribution of the population aged 10 years and above by marital status and main religions

Religion	Marital Status					
	Total population	Never married	Engaged	Married monogamous	Married polygamous	Co-habitation (< 5 years)
Total	5 030 016	45.9	4.0	13.0	30.0	0.4
Catholic	365 304	48.7	4.4	11.8	27.7	0.5
Anglican	63 743	50.5	4.9	10.7	25.9	0.5
Methodist	158 840	49.9	4.2	11.6	26.3	0.5
SDA	34 237	46.3	5.2	11.5	29.3	0.5
Pentecostal	278 315	53.9	5.1	9.4	24.6	0.6
Other Christian	239 929	50.9	4.7	10.7	26.1	0.6
Islam	3 844 615	44.5	3.8	13.6	31.2	0.4
Bahai	1 997	49.0	6.9	11.4	25.6	0.4
Traditional	2 832	34.2	5.6	16.7	30.1	0.8
Other	37 139	47.9	4.5	12.3	27.6	1.0
No Religion	3 065	50.0	4.3	14.0	21.3	0.8

Religion	Marital Status					Total (Row) Percent
	Co-habitation (= >5 years)	Separated	Divorced	Widowed	Don't know	
Total	0.2	1.4	0.8	4.0	0.3	100.0
Catholic	0.2	1.5	0.8	4.0	0.3	100.0
Anglican	0.3	1.6	1.0	4.1	0.4	100.0
Methodist	0.2	1.6	0.9	4.5	0.3	100.0
SDA	0.2	1.5	0.8	4.4	0.4	100.0
Pentecostal	0.3	1.6	0.9	3.5	0.3	100.0
Other Christian	0.3	1.5	0.9	4.0	0.4	100.0
Islam	0.1	1.3	0.7	4.0	0.3	100.0
Bahai	0.4	2.0	0.8	3.1	0.6	100.0
Traditional	0.6	2.3	1.6	7.9	0.2	100.0
Other	0.2	1.3	0.9	3.6	0.7	100.0
No Religion	0.4	2.4	1.5	4.4	0.8	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 8.10b Percentage distribution of selected marital status categories by religion

	All statuses			Never Married			Engaged		
Religion	Total	Male	Female	Total	Male	Female	Total	Male	Female
Catholic	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anglican	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methodist	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDA	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pentecostal	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Christian	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Islam	76.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bahai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Traditional	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No Religion	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total %	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	Married monogamous			Married polygamous			Co-habitation (< 5 years)		
Religion	Total	Male	Female	Total	Male	Female	Total	Male	Female
Catholic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anglican	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methodist	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pentecostal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Christian	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Islam	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bahai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Traditional	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No Religion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 8.10b Percentage distribution of selected marital status categories by religion (continued)

	Co-habitation (= >5 years)			Separated			Divorced		
Religion	Total	Male	Female	Total	Male	Female	Total	Male	Female
Catholic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anglican	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methodist	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pentecostal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Christian	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Islam	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bahai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Traditional	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No Religion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	Widowed			Don't know		
Religion	Total	Male	Female	Total	Male	Female
Catholic	0.0	0.0	0.0	0.0	0.0	0.0
Anglican	0.0	0.0	0.0	0.0	0.0	0.0
Methodist	0.0	0.0	0.0	0.0	0.0	0.0
SDA	0.0	0.0	0.0	0.0	0.0	0.0
Pentecostal	0.0	0.0	0.0	0.0	0.0	0.0
Other Christian	0.0	0.0	0.0	0.0	0.0	0.0
Islam	0.0	0.0	0.0	0.0	0.0	0.0
Bahai	0.0	0.0	0.0	0.0	0.0	0.0
Traditional	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0
No Religion	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.0	0.0	0.0	0.0	0.0	0.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

8.7 Marital status and economic activity status

There are differences in marital status when categorized by activity status and sex (Table 8.11). For employed men, the proportion who are polygamous dominates with 47 per cent compared with 23 per cent for polygamous females. For the unemployed category, 49 per cent of men and 40 per cent of women belong to the never married status. With regard to the population not in the labour force, the never married category dominates with 87 and 65 per cent for men and women respectively.

Table 8.11 Percentage distribution of the population aged 10 years and above by marital status and economic activity status

Marital status	Total males & females	Total employed		Total unemployed		Total not in labour	
		Male	Female	Male	Female	Male	Female
All marital statuses	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Never married	45.9	28.8	16.1	48.8	40.2	87.2	65.4
Engaged	4.0	5.2	5.4	7.8	9.2	1.3	3.0
Married monogamous	13.0	14.6	22.9	12.0	15.7	3.1	7.9
Married polygamous	30.0	47.2	43.8	26.3	24.7	5.9	15.0
Co-habitation (< 5 years)	0.4	0.3	0.4	0.7	0.9	0.3	0.5
Co-habitation (= >5 years)	0.2	0.2	0.2	0.3	0.5	0.1	0.2
Separated	1.4	1.7	2.1	1.8	2.1	0.4	0.8
Divorced	0.8	0.9	1.2	1.1	1.6	0.3	0.5
Widowed	4.0	1.0	7.8	0.8	4.9	0.7	6.2
Don't know	0.3	0.2	0.1	0.3	0.3	0.6	0.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

8.8 Marital status by heads of households

The percentage distribution of marital status by heads of households is presented in Table 8.12. For the total country as a whole, 72 per cent of all households are headed by men compared to just 18 per cent headed by women. These proportions remain the same for the urban and rural areas.

It can be observed that for the total country, 75 per cent of the polygamous households are male-headed as compared to only 18 per cent for female-headed ones. In the case of rural areas, the respective percentages are 84 and 22, while for urban they are 63 and 13. It should be noted that slightly over a quarter of the widowed households are headed by females.

Table 8.12 Percentage distribution of marital status by heads of household, place of residence and sex

Marital status	Sex/Place of Residence								
	Both Sexes			Male Head			Female Head		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Total	1 265 468	697 734	567 734	909 535	504 818	404 717	355 933	192 916	163 017
Never Married	8.9	3.4	15.6	8.8	3.4	15.5	9.0	3.2	16.0
Engaged	5.6	3.2	8.6	6.0	3.3	9.5	4.5	3.0	6.3
Married Monogamous	13.8	13.5	14.1	6.6	5.5	8.0	32.0	34.5	29.1
Married Polygamous	58.8	67.4	48.3	74.8	84.7	62.5	18.0	22.2	13.1
Co-habitation (< 5 years)	0.3	0.2	0.4	0.2	0.1	0.2	0.5	0.4	0.7
Co-habitation (= >5 years)	0.2	0.1	0.2	0.1	0.0	0.1	0.4	0.3	0.5
Separated	2.4	2.0	3.0	1.4	1.1	1.9	5.0	4.2	5.9
Divorced	1.6	1.3	1.9	0.9	0.7	1.1	3.3	2.7	3.9
Widowed	8.4	9.0	7.8	1.1	1.1	1.1	27.2	29.5	24.4
Don't know	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

8.9 Conclusion and recommendations

This analytical report on marital characteristics is based on the data collected during the Sierra Leone 2015 Population and Housing Census. It attempts to present an overview of the marital status situation and its related characteristics at the time of the census. It does not answer the questions on how and why. More detailed information is usually collected in the inter-censal demographic and health surveys.

The main findings were:

vii. The proportion never married is the highest in the country with 46 per cent of all marital status categories. Polygamous marriages follow with an overall proportion of 30 per cent, ranging from 43 to 55 per cent respectively in the Northern and Southern Regions.
viii. There are notable differences between urban and rural areas where the proportions never married are 52 and 41 per cent respectively.
ix. The pattern for the districts follows the national one with the proportions never married dominating in all districts.
x. The proportion widowed is four per cent and does not vary between the regions.
xi. The SMAM, which measures the mean number of years spent in a single state, has been used to estimate the age at first marriage for females. For the total country, the SMAM is 22.3. The estimated figure for the 1985 Census was 18.0, an indication women are now marrying on average four years later. At the regional level, the SMAM ranges from 22 to 27 years respectively for the Northern and Western regions. There are no comparable figures for the 1985 Census. At district level, the SMAM ranges from 17 to 22 years respectively for the districts of Kambia and Western Area Rural.

xii. With regard to employment status, 43 per cent of all employed are in self-employment, followed by full-time students at 30 per cent.
xiii. Religion does not appear to influence the type of marital status. The Islamic faith is dominant with 76 per cent of the population, while the proportion of the Christian faith is 23 per cent. Islam dominates in all marital status categories, ranging from 65 per cent for those co-habiting for 5 years or more to 80 per cent for those monogamously married.
xiv. On economic activity status, in the case of employed men, the proportion who are polygamous dominates with 47 per cent, compared to 23 per cent for polygamous women. For the unemployed category, 49 per cent of men and 40 per cent of women belong to the never married category.
xv. As far as household headship is concerned, 72 per cent of all the households are male headed, as opposed to 18 per cent which are female headed.

It is strongly recommended that, in planning for the next population and housing census, definitions and population coverage in terms of age and marital status categories should be the same as those used in the 2015 Census. This approach will allow for comparisons to be made between the two censuses and with others in the future.

CHAPTER 9 : EDUCATION AND LITERACY

9.1 Introduction

Recognizing the importance of education, and more so, following the 1991-2002 civil wars the government enacted measures intended to strengthen the education system. The Sierra Leone Education Act 2004 stipulates that all children should have access to basic education of nine years which covers six years of primary school and three years of junior secondary school. Also, gender equalities across the 6-3-3-4 formal education structure that is, six years of primary school, three years of junior secondary, three years of senior secondary and four years of vocational or other form of professional specialization should be maintained. These two education priorities, universal basic education and equal access to schooling for boys and girls, are consistent with the 2000 United Nations declaration of Millennium Development Goals (MDGs) of achieving universal primary education and achieving gender equality at all levels of education by 2015.

In this chapter, the 2015 Population and Housing Census data on educational attainment and literacy were analyzed to illustrate what has been achieved in providing universal basic education and gender equality in access to education at the time the census was undertaken. The analysis covers the reported school attendance and the educational attainment of the population three years and older as well as literacy levels of the population 10 years and older. Existing differences among different groups of the population, such as, age, sex, place of residence, geographical region and district are reflected. This is achieved by using proportionate distribution of the population according to the specified groupings of educational attainment and literacy. Also, the success of the government's efforts in expanding access to education is highlighted by comparing information on school attendance from the 1985 and the 2015 censuses and that on current school attendance from the 2004 and 2015 censuses on primary, junior secondary, senior secondary as well as literacy.

9.2 Source of data

The census data provide specific details about the education of every person three years and older. Such details include school attendance, past and current enrollment, and the highest level of education completed. Information on school attendance further distinguishes between those who have ever attended school, those who have never attended school and those who do not know whether they ever attended school. In this analysis, the never been to school population also includes the population that did not know whether they have ever been to school.

The ever attended school, were asked whether they were attending school and if so, had to specify the highest level attended and grade completed. Data from the census are categorized into nine levels of formal education system. These levels are, namely, kindergarten, age 3-5 years; primary age 6-11 years; junior secondary age 12-14 years; senior secondary age 15-18 years; vocational age 19-21 years; first degree age 19-22 years; and post-graduate age 23-24 years. In addition to these nine categories, some people indicated that they were attending Koranic or other form of schooling.

The analysis on educational attainment by age, residence, region, district and sex of the population that has ever been to school covers only those who have gone through the country's formal education system. Percentages of the population three years and older who have ever been to school and also of those who have never been to school are calculated for different analytical groupings. Further analysis of the population ever been to school and currently attending school by their level of education is also presented.

The census also collected information on literacy status of every household member aged 10 years and older. Each person was asked about their literacy status, that is, whether that person can read and write a text in: local language; English; French; Arabic; or Other. The data for these five groups therefore constitute the "literate" population and persons who responded to the question as "None or Don't know" is classified as "not-literate".

9.3 School Attendance

The analysis is in four parts. First, schooling opportunities and progress made over the years for the population 3 years and older is shown in Table 9.1 by age and sex, in Table 9.2 by district, region, place of residence and sex. Second, levels and differences in school attendance of the population 6 years and older ever been to school by sex, region and level of education completed are in Table 9.3, those currently not in school in Table 9.4 and persons currently enrolled in school in Table 9.5. Values of the net and the gross enrollment ratios for primary, junior secondary school (JSS) and senior secondary school (SSS) for the 2004 and the 2015 censuses are shown in Table 9.6 by region and sex. This is followed by a summary of the impact of education on employment in Tables 9.7 and on occupation in Table 9.8, for the population 10 years and older ever been to school.

Table 9.1 shows the pattern of age and sex differences in access to schooling in Sierra Leone. Overall, majority of the total population in Sierra Leone had been to school of which 18.2 percent were in school in the past and 37.3 percent were enrolled in school. Regarding age, the proportion of ever been to school, that is, the total of past and current enrollment, of the population in the ages 6-11 years was 73.8 percent, 12-14 years was 82.3 percent, 15-18 years was 76.4 percent, 19-22 years was 68.3 percent and 23-29 years was 56.9 percent. Some of them had left school and the proportion of those in the older three age groups increased with age ranging from 11 percent to 37.3 percent.

Table 9.1 also suggests possible differences between males and females in access to education. The overall proportion of the male population ever been to school was 60 percent out of which only 39 percent were still enrolled in school and 21 percent attended school in the past. For the female population, 51 percent had been to school but 35 percent were currently enrolled and 16 percent were enrolled in the past.

By age, about a third of the males and of the females aged 3-5 years were currently enrolled in school. Also, percentages of the male and the female population in the ages 6-11 and 12-14 years enrolled in school were above 70 percent and that of females exceeded that of males by about three percentage points. At older age groups, specifically, from age 15-18 years, the percentage of the population that was enrolled in school for males consistently exceeded that of females and in both sexes it declined with age and more significantly among females. By age 60 years and older, the proportion of females that had been to school in the past was 10 percent compared to 27.5 percent for males.

Table 9.1 Population 3 years and older by school attendance, age and sex

Age group	Sex/ School attendance status											
	Both sexes				Male				Female			
	Total	Never	In the past	Currently	Total	Never	In the past	Currently	Total percent	Never	In the past	Currently
All ages	100.0	44.5	18.2	37.3	100.0	39.8	21.0	39.2	100.0	49.0	15.6	35.4
3 - 5	100.0	66.7	0.7	32.6	100.0	67.7	0.7	31.6	100.0	65.7	0.7	33.6
6 - 11	100.0	26.2	1.6	72.2	100.0	27.6	1.6	70.9	100.0	24.9	1.5	73.6
12-14	100.0	17.7	3.6	78.7	100.0	18.9	3.6	77.6	100.0	16.5	3.7	79.8
15 - 18	100.0	23.6	11.0	65.4	100.0	22.9	9.2	67.8	100.0	24.3	12.7	63.0
19 - 22	100.0	31.7	25.7	42.6	100.0	26.0	22.3	51.7	100.0	36.6	28.6	34.8
23 - 29	100.0	43.2	37.3	19.6	100.0	31.5	42.3	26.1	100.0	53.1	32.9	14.0
30 - 34	100.0	58.7	35.0	6.3	100.0	46.2	44.8	9.0	100.0	69.3	26.7	4.1
35 - 39	100.0	62.5	33.9	3.5	100.0	51.7	43.5	4.8	100.0	72.4	25.2	2.4
40 - 44	100.0	64.3	33.1	2.6	100.0	54.2	42.4	3.4	100.0	74.9	23.2	1.9
45 - 49	100.0	64.5	33.3	2.2	100.0	55.3	41.9	2.8	100.0	75.8	22.7	1.5
50 - 54	100.0	67.8	30.3	1.9	100.0	58.3	39.3	2.4	100.0	78.4	20.2	1.4
55 - 59	100.0	67.3	31.0	1.7	100.0	56.9	40.8	2.3	100.0	79.3	19.6	1.1
60+	100.0	80.5	18.1	1.4	100.0	70.6	27.5	1.9	100.0	89.4	9.7	0.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 9.2 reveals that close to 60 percent of the population 6 years and older had been to school, 20 percent in the past and 38 percent were currently enrolled. There are substantial differences between males and females. Almost two thirds of the male population had been to school relative to 53 percent for females. The proportion of the male population that was enrolled in school in the past but was now out of school was 23 percent while 40 percent were still attending school. These two percentages are above the corresponding proportions for the female population, which are 17 percent and 36 percent.

At the regional level, the Northern region had the lowest proportion of its population ever been to school, as low as 48.7 percent while the proportions of the other three regions ranged between 54.4 percent in the Southern region and 77.5 percent in the Western region.

The regional differences among the population that had ever been to school but were no longer enrolled in the Eastern, Northern and Southern regions are very minimal, ranging from 14.1 percent in the Northern region to 18.2 percent in the Southern region. For the population enrolled in school the percentages ranged from 34.6 percent in the Northern region to 41.7 percent in the Eastern region. In terms of place of residence, 46 percent of the rural population had ever been to school compared to75 percent of the urban population. In all the 14 districts, the proportion of the male population that had been to school exceeded that of the female population. It is also evident from Table 9.2 that the proportions of males who had left school are consistently higher than those for females.

Table 9.2 Population 6 years and older by school attendance, region, place of residence, district and sex

Region/ place of residence/ district	Sex/School attendance							
	Both sexes				Male			
	Total	Never	In the past	Currently	Total	Never	In the past	Currently
	100.0	41.9	20.3	37.8	100.0	36.4	23.4	40.2
Place of Residence								
Rural	100.0	53.8	13.5	32.8	100.0	48.2	15.8	36.0
Urban	100.0	25.6	29.7	44.8	100.0	20.6	33.7	45.7
Region								
Eastern	100.0	42.9	16.7	40.4	100.0	38.4	19.5	42.1
Northern	100.0	51.2	14.1	34.6	100.0	44.5	16.7	38.8
Southern	100.0	45.6	18.2	36.2	100.0	40.9	21.0	38.1
Western	100.0	22.5	35.8	41.7	100.0	17.9	40.0	42.0
District								
Kailahun	100.0	40.6	15.5	43.8	100.0	35.5	17.9	46.6
Kenema	100.0	43.0	18.4	38.6	100.0	38.7	21.7	39.7
Kono	100.0	45.3	15.9	38.9	100.0	41.1	18.6	40.3
Bombali	100.0	45.2	16.0	38.7	100.0	38.6	18.8	42.6
Kambia	100.0	53.4	13.8	32.8	100.0	43.9	17.0	39.1
Koinadugu	100.0	62.6	7.3	30.2	100.0	58.8	8.5	32.6
Port Loko	100.0	47.9	18.1	34.0	100.0	39.4	21.7	38.9
Tonkolili	100.0	51.7	13.0	35.2	100.0	46.0	14.9	39.1
Bo	100.0	39.0	21.5	39.5	100.0	34.0	24.6	41.4
Bonthe	100.0	52.7	15.9	31.4	100.0	49.5	18.4	32.2
Moyamba	100.0	51.4	17.6	31.1	100.0	45.6	20.2	34.2
Pujehun	100.0	47.4	14.8	37.8	100.0	43.3	17.2	39.5
Western Area Rural	100.0	29.2	31.4	39.4	100.0	24.0	35.6	40.4

Table 9.2 Population 6 years and older by school attendance, region, place of residence, district and sex (continued)

Region/ place of residence/ district	Sex/School attendance			
	Female			
	Total	Never	In the past	Currently
Total	100.0	47.1	17.3	35.6
Place of Residence				
Rural	100.0	59.1	11.2	29.7
Urban	100.0	30.4	25.8	43.8
Region				
Eastern	100.0	47.4	13.9	38.7
Northern	100.0	57.5	11.8	30.7
Southern	100.0	50.0	15.7	34.3
Western	100.0	27.1	31.6	41.3
District				
Kailahun	100.0	45.7	13.2	41.1
Kenema	100.0	47.2	15.2	37.6
Kono	100.0	49.4	13.1	37.5
Bombali	100.0	51.5	13.4	35.1
Kambia	100.0	61.8	11.0	27.2
Koinadugu	100.0	66.2	6.0	27.8
Port Loko	100.0	55.5	14.9	29.6
Tonkolili	100.0	57.2	11.2	31.6
Bo	100.0	43.7	18.5	37.8
Bonthe	100.0	55.7	13.6	30.7
Moyamba	100.0	56.6	15.1	28.2
Pujehun	100.0	51.2	12.6	36.3
Western Area Rural	100.0	34.5	27.2	38.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Compared to the 1985 and the 2004 censuses, school attendance in Sierra Leone had increased in 2015. As shown in Table 9.3, the proportion of the population five years and older who had never been to school had decreased from 70.7 percent in 1985 to 42.3 percent in 20215 and the proportion attending school more than doubled from 14.7 percent to 38.2 percent over the two periods. In terms of sex, 18.1 percent of the males and 11.3 percent of the females were attending school in 1985 and these percentages increased to 40.4 and 36.1 in 2015, respectively. Between the 1985 and the 2015 censuses, the most notable improvement in access to education was observed in the northern region, in particular, among females where in 1985 only 10.6 percent were attending school and by 2015 it was 31.1 percent. Changes in access to education between the 2004 and 2015 census are summarized on Table 9.7 showing ratios of current school attendance in primary, junior secondary and senior secondary.

Table 9.3 Population 5 years and older by school attendance, region, and sex in 1985 and 2015

Region/ Sex	School attendance							
	1985				2015			
	Total	Never	In the past	Currently	Total	Never	In the past	Currently
Total								
Both sexes	100.0	70.7	14.6	14.7	100.0	42.3	19.5	38.2
Male	100.0	63.9	18.0	18.1	100.0	37.1	22.5	40.4
Female	100.0	77.3	11.3	11.4	100.0	47.2	16.7	36.1
Eastern								
Both sexes	100.0	71.7	14.1	14.2	100.0	43.1	16.0	40.9
Male	100.0	64.8	17.6	17.6	100.0	38.8	18.7	42.5
Female	100.0	78.9	10.6	10.6	100.0	47.2	13.4	39.3
Northern								
Both sexes	100.0	81.6	9.2	9.2	100.0	51.6	13.5	34.9
Male	100.0	75.3	12.3	12.4	100.0	45.3	15.9	38.8
Female	100.0	87.3	6.4	6.4	100.0	57.6	11.3	31.1
Southern								
Both sexes	100.0	72.2	14.3	13.5	100.0	45.9	17.5	36.6
Male	100.0	65.5	18.2	16.3	100.0	41.6	20.1	38.4
Female	100.0	78.5	10.7	10.8	100.0	50.0	15.1	35.0
Western								
Both sexes	100.0	36.7	31.5	31.8	100.0	23.0	34.8	42.2
Male	100.0	31.0	34.2	34.7	100.0	18.5	39.0	42.5
Female	100.0	42.6	28.6	28.8	100.0	27.4	30.8	41.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

9.4 Levels of education attained

The percentages shown in Table 9.4 indicate that the proportion of the population that had ever been to school is declining starting from primary up to the tertiary level, possibly, because of inadequate education facilities and or other circumstances that encourage school drop-out. It is also evident that there are no major differences in the level of education completed among the population that had ever been to school between the Northern, Eastern and the Southern regions.

A lower proportion of the male population had no education, 36 percent compared to 47 percent among the female population. Across the regions, the proportion of females without education was 13 percentage points in the Northern region and 9 percentage points in the Eastern and Southern regions above the levels for males. At the primary level of education, the percentages for females in the Eastern, Southern and Western regions were higher than those for males, while in the Northern region the proportions were 26.3 percent for males and 24.2 percent for females. For junior secondary, the range of differences between males and females were very minimal, except in the Northern region where the proportion for males was two percentage points above that of females of 9.8 percent. The percentages of the population with senior secondary education up to the tertiary education decreased with level of education; those for males being above those for females by about twice as much or more. Also, the disparity between females' and males' level of educational attained was more pronounced at the first degree and tertiary education level.

Table 9.4 Population 6 years and older by level of education, region and sex

Sex/ Region	Total	Level of education				
		No education	Kinder garten	Primary	Junior secondary	Senior secondary
Total	0.2	1.5	0.8	4.0	0.3	100.0
Northern	0.3	1.6	1.0	4.1	0.4	100.0
Eastern	0.2	1.6	0.9	4.5	0.3	100.0
Southern	0.2	1.5	0.8	4.4	0.4	100.0
Western	0.3	1.6	0.9	3.5	0.3	100.0
Male						
Total	100.0	36.4	2.6	25.8	14.1	14.1
Northern	100.0	44.5	2.2	26.3	12.3	10.1
Eastern	100.0	38.4	2.8	26.9	14.9	11.9
Southern	100.0	40.9	2.2	26.3	12.7	10.8
Female						
Total	100.0	47.1	2.3	26.3	12.6	8.6
Northern	100.0	57.5	1.8	24.2	9.8	5.2
Eastern	100.0	47.4	2.5	28.3	13.4	6.7
Southern	100.0	50.0	2.0	27.9	11.7	6.1
Western	100.0	27.1	3.3	26.0	17.1	18.3

Table 9.4 Population 6 years and older by level of education, region and sex (continued)

Sex/ Region	Level of Education				
	Vovational/ technical/ nursing/ teacher	First degree	Post-graduate & PHD	Koranic	Other
Total	2.3	1.3	0.4	0.9	0.2
Northern	1.6	0.4	0.1	0.7	0.1
Eastern	1.7	0.5	0.2	0.9	0.1
Southern	1.9	0.9	0.2	1.6	0.1
Western	4.4	3.9	1.1	0.4	0.4
Male					
Total	2.8	1.8	0.6	1.6	0.2
Northern	2.2	0.7	0.2	1.3	0.1
Eastern	2.4	0.8	0.3	1.6	0.1
Southern	2.3	1.3	0.3	3.0	0.1
Female					
Total	1.8	0.8	0.2	0.2	0.1
Northern	1.0	0.2	0.1	0.2	0.1
Eastern	1.1	0.2	0.1	0.2	0.1
Southern	1.4	0.5	0.1	0.2	0.1
Western	4.3	2.6	0.7	0.2	0.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

9.5 Past School Attendance

During the 2015 Population and Housing Census, the head of household was required to provide information on school attendance for each member aged 3 years and older. If the response was affirmative then the level of education completed had to be specified regardless of whether that person was still enrolled in school. Clarification was also sought to ascertain the number of people who were enrolled in school at the time of the census. Past school attendance of the population 6 years and older by level of education, region and sex is presented in Table 9.5.

As shown in Table 9.5, for both sexes and for all regions, the percentages of the population 6 years and older who had left school having attained primary, junior secondary or senior secondary school level of education were 26.2 percent, 27.2 percent and 26.1 percent, respectively. In the regions, the percentage of persons who had attained primary education in the Eastern, the Northern and the Southern regions ranged from 31.3 percent to 31.9 percent and these percentages were substantially above that of the Western region which was 17.5 percent.

In contrast, 34.4 percent of the Western region population had attained senior secondary education level which was more than 10 percentage points higher relative to the Eastern, the Northern and the Southern regions. Compared to males, a higher proportion of females had left school, having completed primary, junior secondary and senior secondary levels of education. The percentages of females who had left school having attained primary level of education were 32.5 percent, junior secondary 30.6 percent senior secondary 20.8 percent, while for males the respective proportions were 21.3 percent, 24.6 percent and 30.2 percent.

Table 9.5 Past school attendance of population 6 years and older by level of education, region and sex

	Level of education				
Sex/ Region	Total	Kindergarten	Primary	Junior secondary	Senior secondary
Both sexes					
All regions	100.0	4.4	26.2	27.2	26.1
Eastern	100.0	5.5	31.7	30.0	20.5
Northern	100.0	4.9	31.9	28.8	20.8
Southern	100.8	4.9	31.3	27.5	21.6
Western	100.0	3.7	17.5	24.7	34.4
Male					
All regions	100.0	4.2	21.3	24.6	30.2
Eastern	100.0	5.2	25.9	27.4	25.0
Northern	100.0	4.7	25.6	26.4	25.3
Southern	100.0	4.0	24.6	24.5	26.1
Western	100.0	3.5	14.7	22.1	38.0
Female					
All regions	100.0	4.7	32.5	30.6	20.8
Eastern	100.0	5.8	39.6	33.6	14.3
Northern	100.0	5.3	40.4	32.0	14.9
Southern	100.0	4.4	39.7	31.3	15.9
Western	100.0	4.0	21.0	28.1	29.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 9.5 Past school attendance of population 6 years and older by level of education, region and sex (continued)

Sex/ Region	Level of education				
	Vocational/ technical/ nursing/ teacher	First Degree	Post-graduate & PHD	Koranic	Other
Both sexes					
All regions	7.3	3.9	1.4	2.6	0.7
Eastern	6.1	2.0	0.9	3.0	0.4
Northern	6.8	1.8	0.7	3.5	0.5
Southern	7.0	2.9	0.9	4.3	0.5
Western	8.3	6.7	2.5	1.1	1.1
Male					
All regions	7.9	5.0	1.8	4.0	0.8
Eastern	7.5	2.7	1.1	4.7	0.4
Northern	8.4	2.6	1.0	5.4	0.6
Southern	8.1	4.0	1.2	7.0	0.5
Western	7.8	8.3	3.1	1.5	1.2
Female					
All regions	6.5	2.5	0.9	0.7	0.6
Eastern	4.2	0.9	0.5	0.8	0.3
Northern	4.7	0.9	0.4	1.0	0.4
Southern	5.6	1.5	0.4	0.8	0.4
Western	9.0	4.8	1.7	0.5	1.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

9.6 Current school attendance

The percentage distribution of the population 6 years and older enrolled in school at the time of the census in Table 9.6, shows that more than 50 percent of both males and females had completed primary education and close to 20 percent had attained junior secondary school level. The regional average of the population that had attained primary school level was 55 percent for both sexes, 52 percent for males and 58 percent for females. Combined with those who had completed junior secondary and senior secondary, the proportions were 91 percent for both sexes, 90 percent for males and 93 percent for females. Thus, only 10 percent of the males and 7 percent of the females had attained any level of education beyond senior secondary school.

Among the population that had attained primary education level, regional differences are also noticeable. In the Northern region, 57 percent of the males and 63 percent of the females have completed primary education while in the Southern region, 55 percent of the males and 63 percent of the females had completed primary education. Across the regions, there were no major differences in the proportions of males and females who had completed junior secondary education. The proportions ranged from 21 percent in the Northern region to 23 percent in the Eastern region for males and 20 percent in the Northern region to 23 percent in the Eastern region for females.

Table 9.6 Current school attendance of population 6 years and older by level of education, region and sex

	Level of education				
Sex/ Region	Total	Kindergarten	Primary	Junior secondary	Senior secondary
Both sexes					
All regions	100.0	4.1	54.9	20.6	15.8
Eastern	100.0	3.6	59.7	20.1	13.4
Northern	100.0	4.3	55.3	22.7	14.4
Southern	100.0	3.8	59.2	19.9	12.3
Western	100.0	4.8	44.6	19.6	23.3
Male					
All regions	100.0	4.0	51.9	20.7	17.6
Eastern	100.0	3.6	56.8	20.5	15.1
Northern	97.9	4.1	51.9	22.8	16.6
Southern	100.0	3.7	55.4	19.9	13.9
Western	100.0	4.7	42.2	19.3	25.1
Female					
All regions	100.0	4.2	58.1	20.5	13.9
Eastern	100.0	3.7	63.2	19.6	11.3
Northern	100.0	4.4	59.0	22.6	12.2
Southern	100.0	3.8	63.1	19.9	10.6
Western	100.0	4.9	47.0	20.0	21.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 9.6 Current school attendance of population 6 years and older by level of education, region and sex (continued)

	Level of education				
Sex/ Region	Vocational/ technical/ nursing/ teacher	First Degree	Post-graduate & PHD	Koranic	Other
Both sexes					
All regions	2.2	1.3	0.2	0.9	0.0
Eastern	1.8	0.5	0.1	0.7	0.0
Northern	1.8	0.5	0.1	0.9	0.0
Southern	1.6	1.0	0.1	2.2	0.0
Western	3.5	3.5	0.6	0.1	0.1
Male					
All regions	2.3	1.6	0.3	1.6	0.0
Eastern	2.1	0.7	0.1	1.1	0.0
Northern		0.6	0.2	1.6	0.0
Southern	1.6	1.3	0.2	4.1	0.0
Western	3.5	4.2	0.7	0.2	0.1
Female					
All regions	2.0	1.0	0.1	0.2	0.0
Eastern	1.5	0.3	0.1	0.3	0.0
Northern	1.4	0.2	0.1	0.2	0.0
Southern	1.6	0.7	0.1	0.3	0.0
Western	3.5	2.7	0.4	0.1	0.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 9.7 compares gross and net enrollment ratios for primary, junior secondary and senior secondary that were calculated from the 2004 and the 2015 censuses data. The gross enrollment ratio (GER) is equal to total enrolment regardless of age, as a percentage of the official school-age population corresponding to that level of education. The GER is intended to show the general level of participation at a given level of education. It indicates the capacity of the education system to enroll students of a particular age group and complements the net enrolment ration (NER) by indicating the extent of over-aged and under-aged enrolment. The NER only accounts for the same age group in both the numerator and the denominator, and thus excludes the under-aged and over-aged enrolled at a given level of education. For example, the GER for primary is the total population attending primary school divided by the total population aged 6-11 years times 100 and for the NER, the numerator will only include persons aged 6-11 years currently enrolled in primary school and the denominator will be inclusive of the total population aged 6-11 years.

At the national level, the pattern of the GER and the NER values for the primary level of education are relatively similar, suggesting that between 2004 and 2015 the capacity of the education system at that level has not changed much. On the other hand, at the JSS and SSS levels of education, the capacity of the education system in 2015 has more than doubled relative to what it was in 2004. For both sexes, in 2004, the GER for JSS was 12 percent and for SSS it was six percent; while in 2015 the percentages were 91 and 56, respectively. In all the regions, the capacity of the JSS and SSS to accommodate the 12-14 and 15-17 year olds has expanded but very few of them are enrolled at these levels.

Table 9.7 Comparison of the 2004 and 2015 enrollment ratios by region, level of education and sex

Region/ Level of education	2004					
	Net enrollment ratio			Gross enrollment		
	Both sexes	Male	Female	Both sexes	Male	Female
Total						
Primary	64	66	64	104	110	98
JSS	12	13	11	41	49	32
SSS	6	7	5	22	30	14
Eastern						
Primary	65	66	64	114	110	98
JSS	8	10	7	34	43	24
SSS	3	4	2	12	18	6
Northern						
Primary	57	60	55	94	102	84
JSS	6	8	5	25	32	17
SSS	2	2	1	10	7	3
Southern						
Primary	62	61	64	102	103	100
JSS	12	13	10	39	47	31
SSS	4	5	3	17	24	10
Western						
Primary	77	78	76	116	120	113
JSS	27	29	25	78	90	67
SSS	22	21	22	53	67	40

Source: Statistics Sierra Leone, 2015 Population and Housing Census

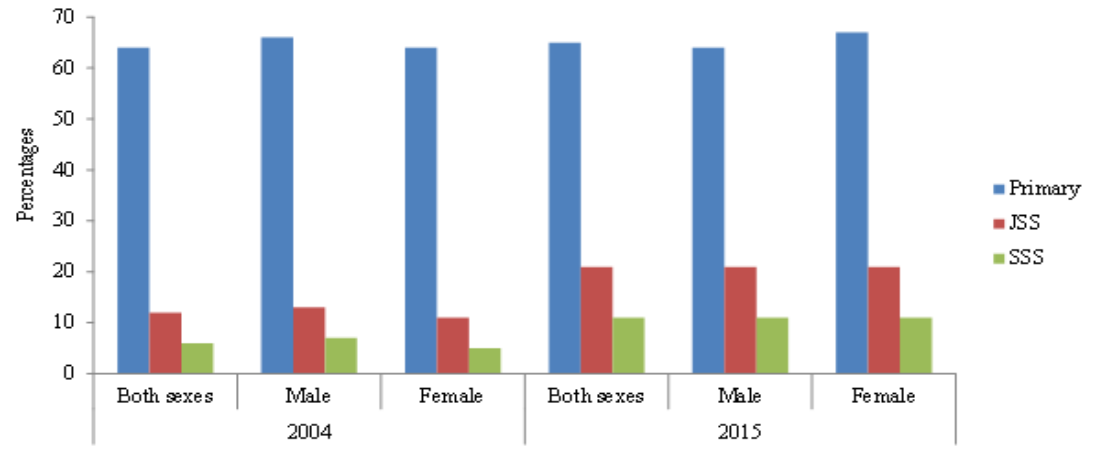
Table 9.7 Comparison of the 2004 and 2015 enrollment ratios by region, level of education and sex (continued)

Region/ Level of education	2015					
	Net enrollment ratio			Gross enrollment		
	Both sexes	Male	Female	Both sexes	Male	Female
Total						
Primary	65	64	67	97	95	100
JSS	21	21	21	91	94	89
SSS	11	11	11	56	62	50
Eastern						
Primary	68	65	70	101	97	104
JSS	22	22	21	105	108	103
SSS	9	10	8	49	55	43
Northern						
Primary	60	60	60	89	88	89
JSS	17	18	17	80	85	75
SSS	8	8	7	42	48	36
Southern						
Primary	64	60	68	97	90	103
JSS	17	17	17	85	85	86
SSS	7	8	7	42	46	37
Western						
Primary	76	76	76	115	114	115
JSS	29	30	29	100	107	95
SSS	22	21	22	104	115	94

Source: Statistics Sierra Leone, 2015 Population and Housing Census

A comparison of the pattern of net enrollment ratios between the 2004 and the 2015 censuses is shown in Figure 9.1 by level of education and sex, for the primary, junior secondary and senior secondary school age populations. It is noted that the net enrollment ratios for primary were relatively similar, however, the ratio for the males exceeded that for the females in 2004 and the reverse is the case in 2015. Furthermore, between the 2004 and the 2015 censuses, substantial progress has been achieved in expanding the capacity of both the junior and senior secondary education systems. A higher proportion of the 6-11 year olds were enrolled in junior secondary school and more 12-14 year olds were enrolled in senior secondary in 2015 than it was in 2004. In both 2004 and 2015 the net enrollment ratios for males were above those for females.

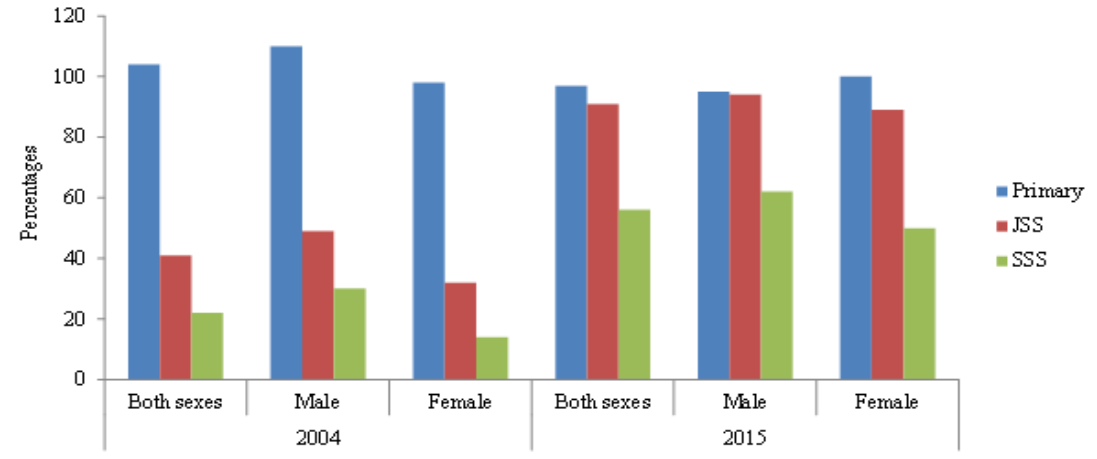
Figure 9.1 Comparison of the 2004 and 2015 net enrollment ratios by level of education and sex



Source: Statistics Sierra Leone, 2015 Population and Housing Census

Further evidence of expansion in junior and senior secondary education system is presented in Figure 9.2 which shows the gross enrollment ratios for 2004 and 2015. In line with the government's policy of providing basic education, that is, primary and junior secondary for every child in the country, the gross enrollment ratios for 2015 had more than twofold of the levels for 2004 and this change is more pronounced among the females.

Figure 9.2 Comparison of the 2004 and 2015 gross enrollment ratios by level of education and sex



Source: Statistics Sierra Leone, 2015 Population and Housing Census

9.7 Educational attainment by selected economic characteristics

The analysis of selected economic characteristics of the population 10 years and older presented in Table 9.7, sheds light on the importance of education and employment opportunities. Three quarters of the population in Sierra Leone were self-employed without employees and combined with self-employed with employees constituted 79.2 percent of the population age 10 years and older. Paid employment accounted for 9.6 percent and unpaid family workers constituted 5.1 percent. The percentage of these four employment status categories was 94 percent.

The percentages of self-employed and paid family worker decreased with educational level, while. the reverse prevails among paid employees ranging from 2.5 percent for no education to 70 percent of the population with tertiary education. The percentage of males working as paid employees was consistently higher than that of the female population ranging from 4.1 percent for males with no education to 71.9 percent of males with tertiary education. The respective percentages for females are 1.3 percent and 65.7 percent.

Table 9.8 Economically active population 10 years and older by level of education, employment and sex

Level of education								
Sex/ Employment	Total	No education	Primary & junior secondary	Senior secondary	Vocational/ technical/ nursing/ teacher	First degree	Post-graduate & PHD	Other
Both sexes								
Total percent	100	100	100	100	100	100	100	100
Paid employee	9.6	2.5	9.3	27.0	63.1	68.3	70.3	9.0
Self-employed without employees	74.9	83.4	72.9	53.1	20.9	15.3	16.6	77.5
Self-employed with employees	4.3	4.2	4.5	4.6	3.6	4.2	5.4	4.3
Unpaid family worker	5.1	6.0	5.0	2.1	0.9	0.6	0.6	5.2
Paid apprentice	0.6	0.4	1.0	1.0	0.6	0.5	0.5	0.6
Unpaid apprentice	1.4	1.2	2.1	1.4	0.8	0.4	0.3	1.0
worked before but currently looking for work	0.8	0.4	1.0	2.1	2.4	2.4	2.1	0.8
Looking for work for the first time	3.4	2.0	4.3	8.7	7.7	8.3	4.3	1.6
Male								
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Paid employee	13.8	4.1	12.9	29.2	62.7	69.2	71.9	9.1
Self-employed without employees	69.5	80.8	67.4	50.7	22.0	15.0	15.4	77.4
Self-employed with employees	4.6	4.5	5.0	4.8	3.9	4.5	5.5	4.4
Unpaid family worker	4.4	5.4	4.3	1.8	0.9	0.5	0.6	5.1
Paid apprentice	0.9	0.7	1.4	1.2	0.6	0.5	0.5	0.6
Unpaid apprentice	1.8	1.7	2.9	1.5	0.7	0.3	0.3	1.0
Worked before but currently looking for work	1.1	0.5	1.3	2.3	2.5	2.4	2.3	0.8
Looking for work for the first time	4.0	2.4	4.7	8.6	6.8	7.6	3.7	1.5
Female								
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Paid employee	5.4	1.3	5.1	21.7	63.8	65.6	65.7	8.6
Self-employed without employees	80.5	85.5	79.3	59.0	19.1	16.3	20.0	78.1
Self-employed with employees	3.9	3.9	3.9	4.0	3.2	3.4	5.0	3.7
Unpaid family worker	6.0	6.5	5.8	2.9	1.0	0.9	0.9	5.5
Paid apprentice	0.3	0.2	0.4	0.6	0.5	0.5	0.5	0.5
Unpaid apprentice	0.8	0.8	1.1	1.1	0.9	0.5	0.4	0.8
Worked before butcurrently looking for work	0.4	0.2	0.6	1.6	2.2	2.3	1.4	0.7
Looking for work for the first time	2.7	1.6	3.8	9.1	9.3	10.4	6.2	2.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

As shown in Table 9.9, agricultural and fishery activities were the major occupations and they employed 59.9 percent followed by services, shops and market sales workers employing 17.5 percent of the employed population. These two occupational groups also dominated employees with no education, basic education and senior secondary level of education. For persons with no education the percentages were 74.2 and 13.4, with basic education 47.0 and 24.7 and with senior secondary education 17.4 and 33.0, accordingly. At the higher levels of education attainment, the dominant occupation was professionals.

The percentages of employed males and females by occupation were not uniform across the different educational levels. The only similarities between the two sexes were among those with no education or had completed basic education and were employed in agricultural and fishery occupations. The respective proportions at each of the two educational levels were 74 percent and 47 percent. Of the remaining occupations, females dominate service, shop and market sales workers, particularly those with basic and senior secondary level of education and professional occupation by females who had completed vocational, technical, nursing and teaching education. At the first degree and tertiary level both males and females were equally likely to be employed in professional occupation. The proportion of males in professional occupations with first degree was 46.7 percent and the proportion with tertiary education level was 49 percent while for females the percentages were 47 percent and 48.7 percent, respectively.

Table 9.9 Economically active population 10 years and older by level of education, occupation and sex

Sex	Occupation	Level of education						
		No Education	Primary & junior secondary	Senoir secondary	Vocational/ technical/ nursing/ teacher	First Degree	Post-graduate & PHD	Other
Both sexs	Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Legislators senior officials & managers	0.5	0.9	2.0	3.7	10.7	14.4	1.0
	Professionals	0.8	2.9	10.1	50.4	46.8	48.9	5.2
	Technicians & associate professionals	0.9	2.5	6.9	9.2	8.8	7.4	2.0
	Clerks	0.2	0.5	2.3	4.0	6.7	4.4	0.5
	Service & shop & market sales workers	13.4	24.7	33.0	14.0	13.1	11.0	15.5
	Agricultural and fishery workers	74.2	47.0	17.4	6.5	4.1	4.9	60.5
	Craft and related trade workers	6.3	11.4	12.4	5.8	4.2	3.8	8.9
	Plant & machine operators & assemblers	1.5	4.8	8.1	2.9	2.4	2.1	3.4
	Elementary occupations	2.2	4.4	5.6	2.1	1.5	1.5	2.5
	Other	0.2	0.8	2.3	1.4	1.7	1.5	0.4
Male	Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Legislators senior officials & managers	0.5	1.1	2.1	4.1	10.9	15.3	1.0
	Professionals	1.1	3.7	9.5	48.6	46.7	49.0	5.4
	Technicians & associate professionals	1.2	3.3	7.5	9.2	9.4	8.0	2.0
	Clerks	0.2	0.6	2.2	3.4	5.6	3.8	0.4
	Service & shop & market sales workers	8.0	14.8	26.3	11.9	12.1	9.2	12.1
	Agricultural and fishery workers	73.8	47.2	19.3	8.1	4.3	5.0	63.6
	Craft and related trade workers	10.3	16.4	14.7	7.0	4.8	4.2	9.3
	Plant & machine operators & assemblers	3.1	8.6	11.0	4.1	2.9	2.6	3.9
	Elementary occupations	1.5	3.0	4.6	1.8	1.4	1.3	1.9
	Other	0.2	1.1	2.7	1.8	2.0	1.7	0.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 9.9 Economically active population 10 years and older by level of education, occupation and sex (continued)

Sex	Occupation	Level of education						
		No Education	Primary & junior secondary	Senoir secondary	Vocational/ technical/ nursing/ teacher	First Degree	Post-graduate & PHD	Other
Female	Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Legislators senior officials & managers	0.4	0.7	1.6	3.1	10.0	11.8	0.9
	Professionals	0.5	1.9	11.6	53.6	47.0	48.7	4.2
	Technicians & associate professionals	0.6	1.5	5.3	9.2	7.1	5.7	2.3
	Clerks	0.1	0.4	2.4	5.3	9.7	6.3	1.0
	Service & shop & market sales workers	17.8	36.1	49.7	17.9	16.2	16.7	37.5
	Agricultural and fishery workers	74.4	46.8	12.6	3.5	3.7	4.6	40.5
	Craft and related trade workers	3.1	5.5	6.6	3.5	2.8	2.6	6.5
	Plant & machine operators & assemblers	0.2	0.4	0.9	0.6	0.9	0.6	0.5
	Elementary occupations	2.7	6.1	8.1	2.7	1.8	2.0	6.0
	Other	0.2	0.5	1.3	0.8	0.8	0.8	0.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

9.8 Literacy

The 2015 Population and Housing Census collected information on literacy from persons 10 years or older who can read and write with understanding in any language. Table 9.10 highlights the prevailing levels of and differences in literacy in the country. A distinction is made between those who can read and write as "literate" and those who cannot read and write as "not-literate". In Table 9.10, the total literate proportion was about equal to that of the not-literate, that is, 51 percent and 49 percent respectively. In the rural areas, 37 percent of the population was literate, which is almost half of the urban proportion of 70 percent. A higher proportion of the male population was literate, 59 percent compared to 44 percent for females.

The most literate population was in the age group 15-19 years followed by the 20-24 years and 10-14 years. For the older population, aged 30-34 years and older the percentage literate was consistently below 50 percent and by age 60 years and older, only 24 percent of the population was literate. Regarding place of residence, up to age 55-59 years, more than 50 percent of the urban population was literate while in the rural areas the proportions were below 50 percent starting from the age group 25-29 years. At age 30-34 years and onwards, the percentage literate among urban population was more than twice that of the rural population. At younger ages, 10-14, 15-19 and 20-24 years differences by place of residence or by sex were not as pronounced. Between males and females high variations are reflected starting from age 25-29 years and over with percentages ranging from 36.6 to 64.5 percent for males, while for females the corresponding range was 12.5 to 38.7 percent.

Table 9.10 Economically active population 10 years and older by level of education, occupation and sex

Age group	Place of residence/ Sex/ Literacy level									
	Total		Rural		Urban		Male		Female	
	Not literate	Literate	Not literate	Literate	Not literate	Literate	Not literate	Literate	Not literate	Literate
Total	48.6	51.4	62.7	37.3	30.3	69.7	40.6	59.4	56.1	43.9
10 - 14	36.9	63.1	47.9	52.1	21.1	78.9	37.5	62.5	36.3	63.7
15 - 19	29.7	70.3	41.8	58.2	14.4	85.6	27.4	72.6	31.9	68.1
20 - 24	36.2	63.8	52.6	47.4	19.9	80.1	27.5	72.5	43.7	56.3
25 - 29	49.5	50.5	66.1	33.9	30.9	69.1	35.5	64.5	61.3	38.7
30 - 34	60.0	40.0	76.3	23.7	39.4	60.6	46.2	53.8	71.7	28.3
35 - 39	63.4	36.6	78.1	21.9	43.6	56.4	51.4	48.6	74.4	25.6
40 - 44	63.8	36.2	78.6	21.4	42.8	57.2	52.4	47.6	76.0	24.0
45 - 49	63.3	36.7	76.7	23.3	43.5	56.5	52.7	47.3	76.2	23.8
50-54	65.3	34.7	78.9	21.1	45.4	54.6	53.91	46.09	78.14	21.86
55-59	64.4	35.6	77.8	22.2	45.7	54.3	51.98	48.02	78.66	21.34
60+	76.1	23.9	84.3	15.7	60.2	39.8	63.37	36.63	87.54	12.46

Note: The sum of the not literate and literate at each age group and by place of residence or sex equals 100 percent.

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 9.11 shows the situation of literacy in the different regions and districts in Sierra Leone. In the five regions, three quarters of the population in the Western region were literate while in the remaining three regions the percentages of the literate population ranged between 42.2 percent in the Northern region and 47.5 percent in the Eastern region. In these same three regions, the proportions literate for male were above 50 percent and those for female were relatively low, ranging from 34 percent in the Northern region to 40 percent in the Eastern region. In contrast, the not-literate population in the Northern, Southern and the Eastern regions was consistently higher among females with a margin of at least 15 percentage points higher relative to males.

Among the 14 districts, percentage of literate population was below 50 percent except in Bo, Western Area Rural and Western Area Urban with 51.2 percent, 66.2 percent and 77.8 percent respectively. Of the remaining districts, about 47 percent of the population in Kailahun, Kenema and Kono were literate with the percentages ranging from 39.3 percent in Kambia to 46.1 percent in Bombali district. In all the districts, the percentage of literate males was consistently above that of females and varied between 11.7 percentage points in the Western urban area district to 23 percentage points in the Kambia district.

Table 9.11 Population 10 years and older by literacy status, place of residence, region, disctrict and sex

Place of residence/ Region/ District	Sex/ Literacy status								
	Both Sexes			Male			Female		
	Total	Not literate	Literate	Total	Not literate	Literate	Total	Not literate	Literate
Total	100.0	48.6	51.4	100.0	40.6	59.4	100.0	56.1	43.9
Place of Residence									
Rural	100.0	62.7	37.3	100.0	54.4	45.6	100.0	70.4	29.6
Urban	100.0	30.3	69.7	100.0	23.3	76.7	100.0	37.1	62.9
Region									
Eastern	100.0	52.5	47.5	100.0	45.4	54.6	100.0	59.6	40.4
Northern	100.0	57.8	42.2	100.0	48.8	51.2	100.0	66.0	34.0
Southern	100.0	54.8	45.2	100.0	46.6	53.4	100.0	62.4	37.6
Western	100.0	25.5	74.5	100.0	19.3	80.7	100.0	31.7	68.3
District									
Kailahun	100.0	52.8	47.2	100.0	45.0	55.0	100.0	60.4	39.6
Kenema	100.0	52.3	47.7	100.0	44.6	55.4	100.0	59.7	40.3
Kono	100.0	52.6	47.4	100.0	46.7	53.3	100.0	58.5	41.5
Bombali	100.0	53.9	46.1	100.0	45.1	54.9	100.0	62.0	38.0
Kambia	100.0	60.7	39.3	100.0	48.4	51.6	100.0	71.4	28.6
Koinadugu	100.0	59.6	40.4	100.0	52.6	47.4	100.0	66.5	33.5
Port Loko	100.0	57.0	43.0	100.0	46.8	53.2	100.0	65.9	34.1
Tonkolili	100.0	60.0	40.0	100.0	52.7	47.3	100.0	67.1	32.9
Bo	100.0	48.8	51.2	100.0	41.0	59.0	100.0	56.2	43.8
Bonthe	100.0	58.9	41.1	100.0	52.0	48.0	100.0	65.5	34.5
Moyamba	100.0	59.9	40.1	100.0	50.8	49.2	100.0	68.0	32.0
Pujehun	100.0	57.7	42.3	100.0	49.2	50.8	100.0	65.8	34.2
Western Area Rural	100.0	33.8	66.2	100.0	26.7	73.3	100.0	40.8	59.2
Western Area Urban	100.0	22.2	77.8	100.0	16.4	83.6	100.0	28.0	72.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The percentages of the literate population, for the 2004 and 2015 censuses, are presented in Table 9.12 by region, district and sex. The level of literate population in the country had increased from 39 percent in 2004 to 51 percent in 2015. The females had achieved the highest increase, by 15 percentage points above the 2004 level of 29 percent, compared to the males with only 10 percentage points above their 49 percent level in 2004. Within the regions, the increases in literacy levels were not the same.

The Eastern region showed the highest gains in literacy, more so among the females, while the increases in the Northern and the Southern regions were the least especially among the males. By district, the proportion of literate population in 2004 in the Western Area Rural district had decreased by three percentage points to 73 percent for males and by one percentage point to 59 percent for the males in 2015. For the rest of the districts, between 2004 and 2015, the percentage of the literate population had increased by at least 10 percentage points except in Moyamba and Kambia districts with seven percentage points.

Table 9.12 Comparison of 2004 and 2015 censuses literate population 10 years and older by region, district and sex

Place of residence/	Literate						Change between 2004 and 2015		
	2004			2015					
Region/ District	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Total	39	49	29	51	59	44	12	10	15
Region									
Eastern	31	40	22	47	55	40	16	15	18
Northern	31	43	20	42	51	34	11	8	14
Southern	34	45	25	45	53	38	11	8	13
Western	65	62	57	75	81	68	10	19	11
District									
Kailahun	32	43	22	47	55	40	15	12	18
Kenema	21	30	13	48	55	40	27	25	27
Kono	27	35	19	47	53	41	20	18	22
Bombali	29	40	18	46	55	38	17	15	20
Kambia	32	48	18	39	52	29	7	4	11
Koinadugu	21	30	14	40	47	33	19	17	19
Port Loko	32	45	21	43	53	34	11	8	13
Tonkolili	30	41	21	40	47	33	10	6	12
Bo	29	40	19	51	59	44	22	19	25
Bonthe	24	34	16	41	48	34	17	14	18
Moyamba	33	45	24	40	49	32	7	4	8
Pujehun	26	36	17	42	51	34	16	15	17
Western Area Rural	68	76	60	66	73	59	-2	-3	-1
Western Area Urban	52	62	42	78	84	72	26	22	30

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 9.13 presents the distribution of the population age 10 years and older by literacy level. Out of the 51 percent literate population, 44 percent were literate in English only, about 3 percent in Arabic only and the remaining 4 percent were literate in other languages. English is more used in the urban areas by 62.4 percent of its population relative to 30.3 percent in the rural area. Arabic is used more by males than females and more so in the rural than urban areas.

Table 9.13 Population 10 years and older by literacy level, place of residence and sex

Literacy	Sex/ Place of residence								
	Both sexes			Male			Female		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Local language only	2.6	2.5	2.8	2.5	2.4	2.6	2.8	2.6	3.0
English only	44.2	30.3	62.4	50.0	35.8	68.0	38.8	25.2	56.9
Local language and English only	0.9	0.6	1.3	1.0	0.7	1.5	0.7	0.5	1.1
French only	0.3	0.2	0.5	0.4	0.2	0.6	0.3	0.2	0.4
Local language and French only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
English and French only	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1
Local language English and French only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arabic only	2.7	3.2	2.0	4.6	5.9	3.1	0.8	0.8	0.9
Local language and Arabic only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
English and Arabic only	0.1	0.1	0.2	0.2	0.1	0.3	0.1	0.0	0.1
Local language English and Arabic only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Languages	0.3	0.3	0.4	0.4	0.3	0.5	0.3	0.2	0.4
Not Literate	48.6	62.7	30.3	40.6	54.4	23.3	56.1	70.4	37.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The dominance of English language among males relative to females is also seen in Table 9.14. In all the regions a higher proportion of males were literate in English with a regional average of 50 percent relative to 39 percent for females. The dominance of males in the use of English also prevails in all the regions and the percentages for males ranged from 42 percent in the Northern and Southern regions to 72 percent in the Western region. For females the range was from 29 percent in Northern region to 62 percent in the Western region. Arabic is used more by the male population and local language only by the female population and in all the regions.

Table 9.14 Population 10 years and older by literacy level, region and sex

Literacy	Region/ Sex								
	Total			Eastern			Northern		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Local language only	2.6	2.5	2.8	2.5	2.4	2.6	2.4	2.3	2.5
English only	44.2	50.0	38.8	41.1	46.2	36.1	35.1	41.8	29.0
Local language and English only	0.9	1.0	0.7	0.5	0.6	0.4	1.0	1.3	0.8
French only	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.2
Local language and French only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
English and French only	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Local language English and French only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arabic only	2.7	4.6	0.8	2.6	4.5	0.6	2.8	4.8	1.0
Local language and Arabic only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
English and Arabic only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Local language English and Arabic only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Languages	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 9.14 Population 10 years and older by literacy level, region and sex (continued)

Literacy	Region/ Sex					
	Southern			Western		
	Both sexes	Male	Female	Both sexes	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0
Local language only	2.5	2.4	2.7	3.1	3.0	3.3
English only	37.2	41.9	32.8	67.2	72.3	62.0
Local language and English only	1.0	1.2	0.8	1.0	1.1	0.8
French only	0.2	0.3	0.2	0.6	0.7	0.5
Local language and French only	0.0	0.0	0.0	0.0	0.0	0.0
English and French only	0.3	0.3	0.2	0.1	0.1	0.1
Local language English and French only	0.0	0.0	0.0	0.0	0.0	0.0
Arabic only	3.6	6.9	0.6	1.8	2.7	0.9
Local language and Arabic only	0.0	0.1	0.0	0.0	0.0	0.0
English and Arabic only	0.0	0.0	0.0	0.0	0.0	0.0
Local language English and Arabic only	0.0	0.0	0.0	0.0	0.0	0.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

9.9 Summary, conclusion and Recommendation

9.9.1 Summary

An analysis of the 2015 Population and Housing Census data on education and literacy covers school attendance, levels of education attained, past school attendance, current school attendance, educational attainment by selected economic characteristics, and literacy. The results on school attendance reveal that 55.5 percent of the population aged 3 years and older had been to school, of which 18.2 attended school in the past and 37.3 percent were attending school at the time of the census. Regarding sex, 60.2 percent of the males had been to school, of which, 21.0 percent had attended school in the past and 39.2 were attending school at the time of the census. For females, the corresponding proportions were 51.0 percent, 15.6 percent and 35.4.

The highest proportion of the population attending school at the time of the census was in the age groups 3-5, 6-11, 12-14, 15-18, 19-22 and 23-29 years. For both sexes, the respective proportions were 32.6 percent, 72.2 percent, 78.7 percent, 65.4 percent, 42.6 percent and 19.6 percent. For the same age groups, in that same order, 0.7 percent, 1.6 percent, 3.6 percent, 11.0 percent, and 25.7 percent, had left school. For the age groups 30-34 and older, the proportion of the population attending school was below 10 percent, declining from 6.3 percent to 1.4 percent for the population 60 years and older.

Forty two percent of persons aged six years and above had no education, 20.3 attended school in the past and 37.8 were attending school at the time of the census. The corresponding proportions for males were 36.4 percent, 23.4 percent and 40.2, while those for females were 47.1 percent, 17.3 percent and 35.6. For both sexes, the proportions that had ever been to school were, 26.1 percent, 13.3 percent and 11.3 percent for completed primary, junior secondary or senior secondary levels of education, respectively. The percentages for the males were 25.8 percent for primary level, 14.1 percent for junior secondary and 14.1 percent for senior secondary. For the females, the respective proportions were 26.3 percent, 12.6 percent and 8.6 percent.

A possible explanation for school drop-out was sought by analyzing past school attendance by level of education completed. For both sexes, 26.2 percent, 27.2 percent and 26.1 percent of the population six years and older who had school left school, did so, having attained primary, junior secondary or senior secondary school levels of education, respectively. Similar proportions for the males were 21.3 percent, 24.6 percent and 30.2 percent, while for the females the percentages were 32.5, 30.6 and 20.8.

The distribution of the population six years and older attending school by level of education suggests that 54.9 percent of both sexes had completed primary education, 20.6 percent junior secondary and 15.8 percent senior secondary education. The proportions for the males were 51.9 percent, 20.7 percent and 17.6 percent; and for the females the proportions were 58.1 percent, 20.5 percent and 13.9 percent, respectively.

A comparison of the 2004 and 2015 enrollment ratios for the population aged 6-11 years, 12-14 years and 15-17 years suggests that the capacity of the education system at the junior secondary and senior secondary levels of education has expanded between the two periods. For both sexes, the gross enrollment ratios (GER) for junior secondary and senior secondary were 41 and 22 in 2004 and 91 and 56 in 2015, respectively. The implication is that in 2004, only 41 percent of the population 12-14 could be accommodated in junior secondary and 22 percent of the 15-17-year-old in senior secondary school and by 2015 the proportions were 91 percent and 56 percent.

The analysis of educational attainment by selected economic characteristics of the economically active population reveals that 74.9 of the population 10 years and older were self-employed without employees, 9.6 percent were paid employees and 5.1 percent were unpaid family workers. By level of education, self-employed dominated among those with no education by as high as 83.4 percent while paid employees accounted for 63.2 percent of those with vocational, technical, nursing or teaching skills; 68.3 percent of those with first degree and 70.3 percent of those with higher levels of education.

In terms of occupation, 74.2 percent of the population with no education was engaged in agricultural and fishery activities and 13.4 percent were service workers. Similar percentages for persons with basic education were 47.0 percent and 24.7 percent; and for those with senior secondary education the proportions were 17.4 percent and 33.0 percent. Professional occupations prevail among those with vocational, technical, nursing and teaching skills at 50.4 percent, first degree at 46.8 percent and higher levels of education at 48.9 percent.

The results of analysis of literacy levels indicate that 51.4 percent were literate with the majority in the urban areas where 69.7 percent were literate and 37.3 percent of the rural population were literate. The literate male population exceeded that of the females and the respective proportions were 59.4 percent and 43.9 percent.

More than 50 percent of the population in the 10-14, 15-19, 20-24 and 25-29 age groups were literate and the corresponding percentages were 63.1 percent, 70.3 percent 63.8 percent and 50.5 percent. For the older population, the proportion literate ranged from 23.9 percent among those aged 60 years and older to 40.0 percent among those aged 30-34 years.

The overall level of literacy has improved between 2004 and 2015. In 2004, the literate population accounted for 39 percent of both sexes, 49 percent of the males and 29 percent of the females and these percentages were 12 points, 10 points, and 15 points below those for 2015, respectively.

English is the most common language and is used by 44.2 percent of both sexes, 50.0 percent of the males and 38.8 percent of the females. The next most used languages are Arabic followed by local languages. For Arabic, the percentages were 2.7 percent for both sexes, 4.6 percent for the males and 0.8 percent for the females and for local languages the respective percentages were 2.6 percent, 2.5 percent and 2.8 percent

9.9.2 Conclusion

Three main conclusions can be drawn from the analysis of the 2015 Population and Housing Census data on education and literacy. Firstly, access to education has increased. The results of the analysis reveal that more than 65 percent of the population aged 6-11 years, 12-14 years and 15-18 years were attending school. At the time, the Education Act 2004 was enacted, the population in the last two age groups were around 2-4 and 5-8 years of age and they had benefited from the introduction and or implementation of new education policies.

Secondly, gender equality in primary, and junior secondary is being achieved and lastly there is unequal access to education by place of residence. Close to 75 percent of the urban population had been to school, 44.8 percent were attending school at the time of the census and 69.7 percent were literate. In contrast, 46.2 of the rural population had been to school, 32.8 percent were attending school at the time of the census and 37.3 percent were literate. This strongly suggests that there is unequal access to education between the rural and urban areas.
.9.8.3 Recommendation

The data on literacy were generated from responses to a question on whether the respondent can read and write with understanding in any language and without being tested. Out of pride, some respondents may falsify their answers, thereby inflating the proportion of the literate population. As far as possible, pertinent data from administrative records, for example, on school enrollment or from surveys should be used to validate the accuracy of census data.

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Table A9.1: School participation ratios for population 3 years and older by age, region, place of residence and sex, 2015

Age/ Region	Population	Current Attendance	Place of residence/ Sex								
			All Residence			Rural			Urban		
			Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	6 589 838	2 455 978	37.3	39.2	35.4	32.2	34.9	29.6	44.4	45.2	43.6
Eastern	1 539 163	616 932	40.1	41.5	38.7	53.5	55.7	51.3	69.4	71.4	67.6
Northern	2 316 308	779 452	33.7	37.2	30.3	45.3	49.4	41.2	64.8	67.7	61.9
Southern	1 336 078	477 705	35.8	37.2	34.4	49.4	50.4	48.4	69.3	70.1	68.5
Western	1 398 289	581 889	41.6	41.9	41.3	54.3	57.7	50.9	62.4	63.8	61.0
3											
Total	233 552	39 736	17.0	16.0	18.0	14.5	13.6	15.3	22.2	21.1	23.3
Eastern	53 380	10 778	20.2	18.8	21.5	17.8	16.4	19.1	26.1	24.9	27.3
Northern	91 339	11 731	12.8	12.6	13.1	11.2	11.1	11.4	19.3	18.8	19.7
Southern	51 251	9 034	17.6	15.9	19.3	16.7	15.1	18.3	23.1	20.9	25.2
Western	37 582	8 193	21.8	20.7	22.9	21.8	21.6	22.1	21.8	20.7	22.9
4											
Total	218 140	70 708	32.4	31.4	33.5	28.0	27.0	29.1	41.4	40.4	42.3
Eastern	49 669	18 861	38.0	36.6	39.4	33.9	32.4	35.3	47.9	46.7	49.1
Northern	87 171	22 317	25.6	25.2	26.1	23.2	22.9	23.6	35.2	34.5	36.0
Southern	46 898	15 361	32.8	30.9	34.6	30.9	29.2	32.7	43.3	41.2	45.2
Western	34 402	14 169	41.2	40.5	41.9	39.7	38.9	40.5	41.2	40.5	41.9
5											
Total	242 822	115 979	47.8	46.3	49.3	42.0	40.4	43.6	60.3	59.4	61.1
Eastern	58 598	31 046	53.0	50.9	55.1	47.9	45.9	50.0	65.9	63.9	67.9
Northern	95 663	38 346	40.1	39.6	40.6	36.9	36.4	37.5	53.4	53.5	53.3
Southern	52 435	24 724	47.2	44.3	50.2	44.7	41.6	47.9	62.5	61.2	63.8
Western	36 126	21 863	60.5	60.0	61.0	55.2	56.9	53.2	60.7	60.1	61.3

Age/ Region	Population	Current Attendance	Place of residence/ Sex								
			All Residence			Rural			Urban		
			Total	Male	Female	Total	Male	Female	Total	Male	Female
6											
Total	219 569	135 946	61.9	60.4	63.4	54.9	53.2	56.6	75.9	75.5	76.3
Eastern	51 346	33 953	66.1	64.2	68.0	60.3	58.1	62.5	80.4	80.2	80.6
Northern	86 409	46 575	53.9	53.2	54.6	49.7	49.3	50.2	70.5	69.6	71.5
Southern	47 043	29 038	61.7	58.6	64.9	58.6	55.3	61.9	78.6	77.2	79.9
Western	34 771	26 380	75.9	76.0	75.7	67.4	69.2	65.7	76.2	76.3	76.1
7											
Total	231 567	161 307	69.7	68.3	71.1	62.5	60.9	64.2	83.3	83.2	83.3
Eastern	57 493	41 645	72.4	70.2	74.7	66.6	64.2	69.1	85.7	84.7	86.6
Northern	87 065	54 619	62.7	62.4	63.1	58.3	58.2	58.4	79.2	78.5	79.8
Southern	49 836	34 063	68.4	65.2	71.6	65.0	61.5	68.7	85.7	86.1	85.3
Western	37 173	30 980	83.3	84.0	82.7	75.8	77.8	73.6	83.6	84.2	83.1
8											
Total	231 262	170 827	73.9	72.5	75.2	66.5	64.9	68.2	87.6	87.7	87.5
Eastern	57 586	44 323	77.0	75.1	78.8	71.5	69.4	73.5	89.2	88.5	89.9
Northern	87 215	58 201	66.7	66.4	67.0	62.2	62.1	62.3	83.4	83.3	83.4
Southern	49 738	35 921	72.2	68.9	75.5	68.4	64.9	72.0	90.2	90.2	90.1
Western	36 723	32 382	88.2	88.8	87.6	82.9	81.4	84.3	88.4	89.1	87.7
9											
Total	182 910	139 340	76.2	74.9	77.5	68.4	67.0	69.8	89.8	89.7	90.0
Eastern	43 671	34 440	78.9	77.1	80.6	73.5	71.8	75.3	90.4	89.6	91.1
Northern	71 530	49 508	69.2	69.0	69.5	64.4	64.3	64.4	86.1	85.9	86.3

Table A9.1: School participation ratios for population 3 years and older by age, region, place of residence and sex, 2015

Age/ Region	Population	Current Attendance	Place of residence/ Sex								
			All Residence			Rural			Urban		
			Total	Male	Female	Total	Male	Female	Total	Male	Female
10-14											
Total	846 137	659 294	77.9	76.7	79.2	69.4	68.5	70.5	90.1	89.8	90.3
Eastern	204 173	161 682	79.2	77.5	80.9	73.3	71.9	75.0	89.8	88.6	91.0
Northern	305 679	217 584	71.2	71.4	70.9	65.8	66.5	65.1	87.1	87.1	87.0
Southern	169 936	128 805	75.8	72.6	79.2	71.2	68.0	74.9	92.1	91.7	92.5
Western	166 349	151 223	90.9	91.0	90.8	84.5	84.2	84.9	91.1	91.2	91.0
15-19											
Total	871 348	555 531	63.8	67.1	60.5	53.4	58.2	48.7	76.7	78.7	74.8
Eastern	215 777	143 379	66.4	69.1	63.8	59.5	63.0	56.0	77.9	79.4	76.4
Northern	296 676	167 080	56.3	61.9	50.8	48.8	55.3	42.3	75.3	78.8	71.9
Southern	174 853	105 954	60.6	63.1	58.2	54.5	57.7	51.3	80.0	80.8	79.2
Western	184 042	139 118	75.6	77.4	73.9	60.5	67.0	54.4	76.0	77.7	74.5
20-24											
Total	660 438	244 141	37.0	45.6	29.5	27.7	37.7	19.8	46.2	52.9	39.8
Eastern	143 389	57 336	40.0	49.8	31.6	33.5	43.4	25.3	50.2	59.6	42.0
Northern	210 194	67 576	32.1	42.6	23.5	25.1	35.6	16.6	48.3	57.4	40.1
Southern	123 396	40 315	32.7	41.1	25.8	26.5	35.3	19.7	50.1	55.7	44.8
Western	183 459	78 914	43.0	48.6	37.6	26.2	35.8	17.1	43.4	48.9	38.1
25-29											
Total	25-29	139 340	76.2	74.9	77.5	68.4	67.0	69.8	89.8	89.7	90.0
Eastern	43 671	34 440	78.9	77.1	80.6	73.5	71.8	75.3	90.4	89.6	91.1
Northern	71 530	49 508	69.2	69.0	69.5	64.4	64.3	64.4	86.1	85.9	86.3
Southern	37 082	27 593	74.4	71.1	77.7	70.2	66.7	73.9	92.0	91.6	92.2

Age/ Region	Population	Current Attendance	Place of residence/ Sex								
			All Residence			Rural			Urban		
			Total	Male	Female	Total	Male	Female	Total	Male	Female
30-34											
Total	434 203	27 435	6.3	9.0	4.1	4.6	7.4	2.5	8.5	10.7	6.3
Eastern	98 243	6 739	6.9	10.2	4.2	5.6	8.6	3.2	9.5	13.2	6.2
Northern	141 717	7 546	5.3	8.4	3.0	4.1	6.9	2.0	9.0	12.3	5.9
Southern	84 097	4 586	5.5	8.0	3.4	4.5	7.0	2.6	9.4	11.4	7.3
Western	110 146	8 564	7.8	9.2	6.2	3.8	4.6	3.0	7.9	9.3	6.3
35-39											
Total	421 172	14 885	3.5	4.8	2.4	2.5	3.7	1.5	4.9	6.0	3.8
Eastern	99 268	3 548	3.6	4.9	2.3	2.7	3.9	1.7	5.3	7.0	3.6
Northern	138 925	4 068	2.9	4.3	1.8	2.3	3.6	1.3	4.8	6.3	3.4
Southern	83 864	2 567	3.1	4.2	2.1	2.5	3.6	1.6	5.3	6.4	4.3
Western	99 115	4 702	4.7	5.5	3.9	2.3	3.3	1.2	4.8	5.6	4.0
40-44											
Total	299 215	7 895	2.6	3.3	1.9	1.8	2.6	1.0	3.8	4.3	3.3
Eastern	69 238	1 670	2.4	3.1	1.6	1.8	2.4	1.0	3.8	4.6	2.8
Northern	101 559	2 244	2.2	3.1	1.3	1.7	2.7	0.9	3.7	4.4	3.0
Southern	60 362	1 354	2.2	3.1	1.4	1.9	2.8	1.0	3.8	4.4	3.3
Western	68 056	2 627	3.9	4.1	3.6	2.4	2.9	1.8	3.9	4.1	3.7
45-49											
Total	242 188	5 403	2.2	2.8	1.5	1.6	2.3	0.8	3.1	3.6	2.6
Eastern	58 077	1 237	2.1	2.6	1.4	1.6	2.1	1.0	3.2	3.6	2.4
Northern	82 790	1 510	1.8	2.5	1.0	1.5	2.2	0.7	2.8	3.5	2.1
Southern	49 390	1 002	2.0	2.7	1.3	1.7	2.4	0.9	3.3	3.6	2.9

Table A9.1: School participation ratios for population 3 years and older by age, region, place of residence and sex, 2015

Age/ Region	Population	Current Attendance	Place of residence/ Sex								
			All Residence			Rural			Urban		
			Total	Male	Female	Total	Male	Female	Total	Male	Female
50-54											
Total	186 793	3 570	1.9	2.4	1.4	1.3	1.9	0.7	2.7	3.1	2.3
Eastern	41 653	725	1.7	2.2	1.2	1.3	1.8	0.7	2.7	3.0	2.2
Northern	65 018	1 104	1.7	2.4	1.0	1.4	2.0	0.7	2.8	3.5	2.1
Southern	38 748	626	1.6	2.1	1.1	1.3	1.9	0.7	2.9	3.0	2.8
Western	41 374	1 115	2.7	3.0	2.4	1.8	1.7	1.8	2.7	3.0	2.4
55-59											
Total	110 449	1 883	1.7	2.3	1.1	1.2	1.9	0.5	2.3	2.8	1.8
Eastern	23 877	393	1.6	2.2	0.9	1.2	1.7	0.5	2.6	3.1	1.7
Northern	38 363	582	1.5	2.2	0.8	1.3	2.0	0.6	2.2	2.9	1.5
Southern	22 887	345	1.5	2.1	0.8	1.2	1.8	0.5	2.7	3.1	2.2
Western	25 322	563	2.2	2.5	1.9	0.9	1.2	0.5	2.3	2.6	1.9
60+											
Total	359 211	4 888	1.4	1.8	0.9	1.0	1.5	0.6	2.0	2.5	1.5
Eastern	82 132	1 015	1.2	1.6	0.9	0.9	1.2	0.6	1.9	2.4	1.4
Northern	133 417	1 699	1.3	1.9	0.8	1.1	1.7	0.6	1.8	2.4	1.2
Southern	82 721	960	1.2	1.6	0.8	1.0	1.5	0.6	2.2	2.6	1.8
Western	60 941	1 214	2.0	2.5	1.5	1.5	1.8	1.3	2.0	2.6	1.5

Table A9.2 Net enrollment ratios by region, level of education, place of residence and sex, 2015

Region/ Level of education	Palce of residence/ Sex								
	Total			Rural			Urban		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Total									
Primary	65	64	67	59	57	61	77	76	77
JSS	21	21	21	15	16	15	28	29	28
SSS	11	11	11	5	6	5	18	19	18
Eastern									
Primary	68	65	70	63	60	65	79	77	80
JSS	22	22	21	18	19	17	28	29	28
SSS	9	10	8	5	6	5	15	16	14
Northern									
Primary	60	60	60	56	56	56	74	73	75
JSS	17	18	17	14	15	13	27	28	26
SSS	8	8	7	5	6	4	15	16	14
Southern									
Primary	64	60	68	60	56	65	80	80	81
JSS	17	17	17	14	14	15	26	28	24
SSS	7	8	7	5	5	4	16	17	15
Western									
Primary	76	76	76	68	67	68	76	76	76

Table A9.3 Gross enrollment ratios by region, level of education, place of residence and sex, 2015

Region/ Level of education	Palce of residence/ Sex								
	Total			Rural			Urban		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Total									
Primary	97	95	100	88	85	90	115	114	117
JSS	91	94	89	77	80	75	110	115	105
SSS	56	62	50	29	33	24	92	102	83
Eastern									
Primary	101	97	104	93	90	96	117	115	119
JSS	105	108	103	95	98	93	122	125	120
SSS	49	55	43	32	37	27	79	87	70
Northern									
Primary	89	88	89	83	83	82	110	108	111
JSS	80	85	75	68	73	62	114	119	110
SSS	42	48	36	27	32	21	82	92	73
Southern									
Primary	97	90	103	90	84	97	124	121	127
JSS	85	85	86	76	74	78	114	122	107
SSS	42	46	37	28	31	24	86	96	76
Western									
Primary	115	114	115	107	108	106	115	114	116
JSS	100	107	95	79	84	74	101	107	95

CHAPTER 10 : ECONOMIC CHARACTERISTICS

10.1 Introduction

The 2015 Census collected information on economic activity from all persons aged 10 years and above. This information is related to employment status, employer, occupation and industry. The economic characteristics will be analysed by sex and age, as well as the level of education and various geographical levels, which will include, total country, urban and rural areas, regions and where possible districts.

It should be noted that there cannot be a comparative analysis of the 2015 Census with the 1985 and the 2004 Censuses because those censuses considered different working age bands. In the 1985 Census, the population considered was 10 years and above, while in the 2004 Census the population under consideration was 15-64 years of age. In the current census, the population under consideration is 15 years and above, although information was also collected on children aged 10 to 15 years. However, the time horizon of economic activity and concepts of labour force are the same.

10.2 Economic activity status

The distribution of economic activity status for the population aged 15 years and above by sex for the whole country is presented in Table 10.1. The employed population makes up 62 per cent of the total population compared to the unemployed which is close to 3 per cent. An unemployed person is one who is not working but is actively looking for work. The population not in the labour force is 35 per cent. These are those who are not working and not actively looking for work.

Separating the population by gender does not significantly change the picture. The proportion of employed males is 65 per cent while that of employed females is 60 per cent. The proportion of unemployed males is just under 4 per cent while that for unemployed females is under 2 per cent. The proportion of males not in the labour force is 32 per cent while that for females is 38 per cent.

10.3 Economically active population

The economically active population is made up of the employed and unemployed population. As noted earlier, an unemployed person is one who is not working but is actively looking for work. The distribution of the economically active population aged 15 years and above by region and sex is presented in Table 10.2. The Northern Region has the largest proportion, 36 per cent, of the economically active population. It should be noted that 34 per cent of the economically active males belong to this region as well. The equivalent proportion for females is 38 per cent, which is the highest proportion among the four regions. On the other hand, the Southern Region has the smallest proportion, 20 per cent, of the economically active population. There are no differences between males and females.

At district level, the distribution of the economically active population aged 15 years and above is presented in Table 10.3. The Western Area Urban district is the only one with double digit percentages for both males and females where the proportions are 16 and 13 per cent respectively. The rest of the districts are all in one-figure digit percentages, with Bonthe having the lowest proportion of 3 per cent for the total and the same proportion for both males and females respectively.

Table 10.1 Distribution of the population aged 15+ years by economic activity status and by sex

Economic activity	Total	
	Number	Per cent
Both Sexes		
Total	4,183,879	100.0
Employed	2,594,487	62.0
Unemployed	112,268	2.7
Not in labour force	1,477,124	35.3
Male		
Total	2,024,944	100.0
Employed	1,305,635	64.5
Unemployed	70,873	3.5
Not in labour force	648,346	32.0
Female		
Total	2,158,935	100.0
Employed	1,288,852	59.7
Unemployed	41,395	1.9
Not in labour force	228,688	38.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 10.2 Distribution of economically active population aged 15+ years by region and by sex

Region	Total		Male		Female	
	Number	Per cent	Number	Per cent	Number	Per cent
Total Country	2,706,755	100.0	1,376,508	100.0	1,330,247	100.0
Eastern	631,778	23.3	325,311	23.6	306,467	23.0
Northern	967,703	35.8	461,609	33.5	506,094	38.0
Southern	541,789	20.0	274,233	19.9	267,556	20.1
Western	565,485	20.9	315,355	22.9	250,130	18.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 10.3 Distribution of economically active population aged 15+ years by district and sex

District	Total		Male		Female	
	Number	Per cent	Number	Per cent	Number	Per cent
Kailahun	199,428	7.4	98,139	7.1	101,289	7.6
Kenema	236,150	8.7	122,709	8.9	113,441	8.5
Kono	196,200	7.2	104,463	7.6	91,737	6.9
Bombali	226,566	8.4	108,950	7.9	117,616	8.8
Kambia	134,317	5.0	60,941	4.4	73,376	5.5
Koinadugu	165,005	6.1	79,904	5.8	85,101	6.4
Port Loko	234,617	8.7	110,678	8.0	123,939	9.3
Tonkolili	207,198	7.7	101,136	7.3	106,062	8.0
Bo	209,025	7.7	108,152	7.9	100,873	7.6
Bonthe	75,823	2.8	39,751	2.9	36,072	2.7
Moyamba	133,213	4.9	63,584	4.6	69,629	5.2
Pujehun	123,728	4.6	62,746	4.6	60,982	4.6
Western Area Rural	167,343	6.2	92,152	6.7	75,191	5.7
Western Area Urban	398,142	14.7	223,203	16.2	174,939	13.2
Total (%)		100.0		100.0		100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

10.3.1 Economically active population by age

The percentage distribution of the economically active population aged 15 years and above, by age group and sex, is presented in Table 10.4. The proportions for males in the younger age groups, from 15-19 to 30-34, are higher for the females than for the males. The opposite is the case from age groups 35-39 to 65 plus, where the proportions for males are higher than those for the females. This can clearly be seen in Table 10.5 where cumulative percentages are presented.

Table 10.4 Distribution of economically active population aged 15 years and above by age group and sex

Age Group	Total		Male		Female	
	Number	Per cent	Number	Per cent	Number	Per cent
Total	2,706,755		1,376,508		1,330,247	
15 - 19	253,355	9.4	122,393	8.9	130,962	9.8
20 - 24	334,692	12.4	148,008	10.8	186,684	14.0
25 - 29	435,304	16.1	201,706	14.7	233,598	17.6
30 - 34	359,147	13.3	173,978	12.6	185,169	13.9
35 - 39	363,682	13.4	185,145	13.5	178,537	13.4
40 - 44	262,502	9.7	143,263	10.4	119,239	9.0
45 - 49	213,279	7.9	125,136	9.1	88,143	6.6
50 - 54	159,763	5.9	91,381	6.6	68,382	5.1
55 - 59	91,181	3.4	53,859	3.9	37,322	2.8
60 - 64	84,813	3.1	46,002	3.3	38,811	2.9
65 +	149,037	5.5	85,637	6.2	63,400	4.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 10.5 Cumulative percentage distribution of economically active population aged 15 years and above by age and sex

	Cumulative %	
Age Group	Male	Female
Total	8.9	9.8
15 - 19	19.7	23.8
20 - 24	34.3	41.4
25 - 29	46.9	55.3
30 - 34	60.4	68.7
35 - 39	70.8	77.7
40 - 44	79.9	84.3
45 - 49	86.5	89.5
50 - 54	90.4	92.3
55 - 59	93.8	95.2
60 - 64	100.0	100.0
65 +	149,037	5.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

10.4 Employed population

10.4.1 Employment status

It has already been shown that the employed population, aged 15 years and above, makes up 62 per cent of the economically active population. The employment status categories are listed below:

i. Paid employee
ii. Self-employed without paid employees
iii. Self-employed with employees (employer)
iv. Paid apprentice
v. Unpaid apprentice

The percentage distribution of the employed population aged 15 years and above by employment status is presented in Tables 10.6a and b. More than three-quarters of the whole employed population are self-employed without paid employees. The proportion of males in this category is 73 per cent while that for females is 83 per cent. This implies that more than three-quarters of the employed females are in self-employment without employees.

The proportion of paid employees is 15 per cent of all male employees as against 6 per cent for the females. The proportion of unpaid family workers is only 5 per cent of the total number of the employed population, with relatively small differences between males and females.

It can further be observed in Table 10.6b that in the case of urban and rural areas, almost two-thirds of the employed population are in rural areas. However, three-quarters of the paid employees are in urban areas. The same applies to paid apprentices where 7 out of 10 are found in urban areas. It can also be noted that more than 80 per cent of the unpaid family workers are found in rural areas.

Table 10.6a Distribution of the employed population aged 15 years and above by employment status and sex

	Sex					
Employment status	Number	Per cent	Male	Per cent	Female	Per cent
Total	2,594,487	100.0	1,305,635	100.0	1,288,852	100.0
Paid employee	271,779	10.5	198,783	15.2	72,996	5.7
Self-employed without employees	2,028,958	78.2	953,888	73.1	1,075,070	83.4
Self-employed with employees (employer)	115,781	4.5	63,801	4.9	51,980	4.0
Unpaid family worker	127,357	4.9	52,700	4.0	74,657	5.8
Paid apprentice	15,999	0.6	12,552	1.0	3,447	0.3
Unpaid apprentice	34,613	1.3	23,911	1.8	10,702	0.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 10.6b Distribution of the employed population aged 15 years and above by employment status and sex

	Sex		
Employment status	Male	Female	Per cent
Total Employed	50.3	49.7	100.0
Paid employees	73.1	26.9	100.0
Self-employed without employees	47.0	53.0	100.0
Self-employed with employees (employer)	55.1	44.9	100.0
Unpaid family worker	41.4	58.6	100.0
Paid apprentice	78.5	21.5	100.0
Unpaid apprentice	69.1	30.9	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 10.6c Distribution of the employed population aged 15 years and above by employment status, sex and residence

	Sex			Place of residence		
Employment status	Rural	Urban	Total	Rural	Urban	Total
Total	50.3	49.7	100.0	64.6	35.4	100.0
Paid employee	73.1	26.9	100.0	22.6	77.4	100.0
Self-employed without employees	47.0	53.0	100.0	69.5	30.5	100.0
Self-employed with employees (employer)	55.1	44.9	100.0	58.5	41.5	100.0
Unpaid family worker	41.4	58.6	100.0	84.8	15.2	100.0
Paid apprentice	78.5	21.5	100.0	30.4	69.6	100.0
Unpaid apprentice	69.1	30.9	100.0	69.1	30.9	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

10.4.2 Employed population by level of education

The census collected information from all persons aged 15 years and above on the highest level of education completed. Proof of certification was not requested. The results relating to the employed population are summarized in Tables 10.8 to 10.10. The levels of education considered are:

i. No education
ii. Basic school (primary and junior secondary school)
iii. Senior secondary school (SSS)
iv. Vocational/ technical / nursing / teacher training
v. Higher education (first degree), and
vi. Tertiary (postgraduate and PhD)

The proportion of the employed population aged 15 years and above with no education is 64 per cent, with significant differences between males and females (56 and 72 per cent respectively). More than three-quarters of the employed population in rural areas have had no education. The proportion of the employed population, 15 years and above, with completed basic school is 21 per cent, with no significant differences between the sexes. After basic school, the proportions of the employed population at higher levels are 20 and 9 per cent respectively for males and females.

There are significant differences between urban and rural areas. The proportion with no education in rural areas is 77 per cent while that for urban areas is 23 per cent. Likewise, the proportions with basic school education are respectively 27 and 17 per cent. The proportion of the employed population with at least senior secondary school education heavily dominates in the urban areas.

Table 10.8a Percentage distribution of employed population by highest level of education and sex

Selected characteristics	Highest educational level						
Sex	Total	No education	Basic school (primary & JSS)	SSS	Voc/ technical/ nursing/ teacher	Higher (first degree)	Tertiary (Post-graduate) and PhD
Total	2,594,487	63.6	20.5	9.1	3.0	1.6	0.6
Male	1,305,635	55.6	21.8	12.8	3.8	2.4	0.9
Female	1,288,852	71.8	19.2	5.3	2.2	0.8	0.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 10.8b Percentage distribution of employed population by highest level of education and residence

Selected characteristics	Highest educational level						
Place of Residence	Total	No education	Basic school (primary & JSS)	SSS	Voc/ technical/ nursing/ teacher	Higher (first degree)	Tertiary (Post-graduate) and PhD
Total	2,594,487	1,650,735	532,650	236,329	77,965	41,781	15,952
Rural	64.3	76.7	53.6	27.0	25.7	12.0	13.3
Urban	35.7	23.3	46.4	73.0	74.3	88.0	86.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

10.4.3 Employed population by occupation

Information on the employed population by different occupations is summarized in Tables 10.9a and 10.9b. The list of all the occupations, which are mutually exclusive, is given below:

i. Legislators and senior officials and managers
ii. Professionals
iii. Technicians and associate professionals
iv. Clerks
v. Service workers and shop and market workers
vi. Agricultural and fishery workers (including farmers, fishermen, animal rearers, hunters, palm wine tappers, poultry workers)
vii. Craft and related trades workers
viii. Plant and machine operators and assemblers
ix. Elementary occupations, and
x. Other

Although there are only small differences in the proportions of males and females in the employed population aged 15 years and above for the total country, there are some significant differences with regard to some occupations. These can be seen in Tables 10.9 a and b. Males dominate in all the occupations, except the agricultural-related occupations and the service workers and elementary occupations. With regard to urban–rural differences, almost two- thirds of all those employed reside in the rural areas. Perhaps unsurprisingly, nine out of ten employees in agriculture reside in the rural areas. For all other occupations, more employees are found in the urban areas.

10.4.4 Employed population by industry

Information on the employed population aged 15 years and above by industry is presented in Tables 10.10a and 10.10b. It can be noted that crop farming is the dominant industry with 61 per cent of all employed females and 52 per cent of all employed males belong to this industry. With regard to urban-rural comparisons, 80 per cent of employees in rural areas are engaged in this industry, compared to 14 per cent in urban areas.

The repair of motor vehicles is the most dominant industry in urban areas with 36 per cent of the employed population aged 15 years and above. The equivalent proportion in rural areas is 6 per cent. It should be noted that most industries are dominated by male employees, except in crop farming, wholesale and retail trade, accommodation and food service activities, real estate and activities of the household as employees.

Table 10.9a Percentage distribution of the employed population aged 15 years and above by occupation, sex and place of residence

	Sex			Place of residence		
Occupation	Male	Female	Total	Rural	Urban	Total
Legislators Senior Officials & Managers	1.0	1.4	0.7	1.0	0.6	1.9
Professionals	4.7	6.3	3.1	4.7	2.0	9.5
Technicians & Associate Professionals	2.2	3.1	1.3	2.2	0.9	4.5
Clerks	0.7	0.8	0.5	0.7	0.2	1.5
Service Workers and Shop and Market Sales Workers	18.0	12.5	23.7	18.0	6.5	38.8
Agricultural and Fishery Worker (Farmers Fishermen Animal Rearers Hunters Palm wine tappers Poultry workers etc.)	58.9	55.2	62.7	58.9	83.3	14.9
Craft and Related Trade Workers	7.9	12.1	3.7	7.9	4.5	14.1
Plant & Machine Operators & Assemblers	2.9	5.5	0.3	2.9	1.0	6.4
Elementary Occupations	3.0	2.2	3.7	3.0	0.8	6.9
Other	0.6	0.9	0.3	0.6	0.2	1.3
Total	100	100	100	100	100	100

Source: Statistics Sierra Leone, 2015 Population and Housing Census

10.4.5 Employed population by main employer

Information on the employed population aged 15 years and above by main employer is presented in Table 10.9b More than eight out of ten people are self-employed. The proportions for males and females are both above 80 per cent. In the case of urban and rural areas, the same phenomenon prevails with 74 and 91 per cent of all employed people in urban and rural areas working for themselves.

The government sector is the second biggest employer, with a five per cent share of employees both in urban and rural areas. With regard to proportions of employees by sex, males dominate in all sectors except self-employed and family member.

Table 10.9b Percentage distribution of the employed population aged 15 years and above by occupation, sex and place of residence

	Sex			Place of residence		
Occupation	Male	Female	Total	Rural	Urban	Total
Total Country	50.3	49.7	100	1.0	0.6	1.9
Legislators Senior Officials & Managers	66.3	33.7	100	4.7	2.0	9.5
Professionals	67.6	32.4	100	2.2	0.9	4.5
Technicians & Associate Professionals	71.2	28.8	100	0.7	0.2	1.5
Clerks	61.9	38.1	100	18.0	6.5	38.8
Service Workers and Shop and Market Sales Workers	34.7	65.3	100	58.9	83.3	14.9
Agricultural and Fishery Worker (Farmers Fishermen Animal Rearers Hunters Palm wine tappers Poultry workers etc.)	47.2	52.8	100	7.9	4.5	14.1
Craft and Related Trade Workers	76.7	23.3	100	2.9	1.0	6.4
Plant & Machine Operators & Assemblers	95.0	5.0	100	3.0	0.8	6.9
Elementary Occupations	37.8	62.2	100	0.6	0.2	1.3
Other	74.1	25.9	100	100	100	100

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 10.10a Distribution of the employed population aged 15+ years by industry, sex and place of residence

Industry	Total	Percent	Sex		Place of residence	
			Male	Female	Rural	Urban
Total	2 594 487	100	100	100	100	100
Crop Farming	1 461 549	56.3	52.0	60.7	80.1	13.5
Animal production	31 972	1.2	1.3	1.2	1.3	1.1
Forestry Logging and Hunting	17 070	0.7	0.9	0.4	0.5	1.0
Fishing & Aquaculture	59 023	2.3	2.9	1.7	2.3	2.1

Table 10.10a Distribution of the employed population aged 15+ years by industry, sex and place of residence (continued)

	Total	Percent	Sex		Place of residence	
Industry			Male	Female	Rural	Urban
Mining and Quarrying	78 609	3.0	4.7	1.4	2.8	3.5
Manufacturing	84 140	3.2	3.6	2.9	2.0	5.5
Electricity gas steam & air conditioning supply	18 109	0.7	1.1	0.3	0.2	1.5
Water supply; sewerage waste management & remediation activities	8 249	0.3	0.5	0.1	0.1	0.8
Construction	51 671	2.0	3.7	0.3	0.6	4.5
Wholesale & Retail Trade Repair of Motor Vehicles and Motorcycles	423 296	16.3	10.8	21.9	5.6	35.6
Transport and Storage	62 378	2.4	4.5	0.3	0.7	5.4
Accommodation and food service activities	24 143	0.9	0.6	1.3	0.2	2.3
Information and Communication	6 720	0.3	0.4	0.1	0.0	0.7
Financial and Insurance activities	7 788	0.3	0.4	0.2	0.0	0.8
Real Estate activities	5 837	0.2	0.2	0.2	0.1	0.5
Professional scientific & technical activities	56 537	2.2	3.2	1.1	0.7	4.9
Administration & support service activities	20 292	0.8	1.3	0.3	0.2	1.8
Public Administration and Defence Compulsory Social Security	34 768	1.3	2.0	0.6	0.3	3.2
Education	40 094	1.5	2.1	1.0	0.8	2.9
Human health and social work activities	26 191	1.0	0.9	1.1	0.4	2.1
Arts entertainment and recreation	10 560	0.4	0.6	0.2	0.1	1.0
Other service activities	34 490	1.3	1.4	1.3	0.3	3.2
Activities of household as employers	26 944	1.0	0.7	1.3	0.6	1.8
Activities of extraterritorial organizations and bodies	4 057	0.2	0.2	0.1	0.0	0.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 10.10b Distribution of the employed population aged 15+ years by industry, sex and place of residence

	Sex			Place of residence		
Industry	Male	Female	Total	Rural	Urban	Total
Total	50.3	49.7	100	64.3	35.7	100
Crop Farming	46.5	53.5	100	91.4	8.6	100
Animal production	51.3	48.7	100	68.6	31.4	100
Forestry Logging and Hunting	69.5	30.5	100	47.5	52.5	100
Fishing & Aquaculture	63.5	36.5	100	66.3	33.7	100
Mining and Quarrying	77.6	22.4	100	58.5	41.5	100
Manufacturing	56.1	43.9	100	39.8	60.2	100
Electricity gas steam & air conditioning supply	78.9	21.1	100	21.5	78.5	100
Water supply; sewerage waste management & remediation activities	77.7	22.3	100	15.4	84.6	100
Construction	92.5	7.5	100	19.6	80.4	100
Wholesale & Retail Trade Repair of Motor Vehicles and Motorcycles	33.3	66.7	100	22.2	77.8	100
Transport and Storage	94.5	5.5	100	19.4	80.6	100
Accommodation and food service activities	31.2	68.8	100	11.8	88.2	100
Information and Communication	78.2	21.8	100	7.2	92.8	100
Financial and Insurance activities	63.3	36.7	100	7.0	93.0	100
Real Estate activities	46.0	54.0	100	17.3	82.7	100
Professional scientific & technical activities	74.7	25.3	100	20.4	79.6	100
Administration & support service activities	81.8	18.2	100	15.9	84.1	100
Public Administration and Defence Compulsory Social Security	77.0	23.0	100	15.0	85.0	100
Education	68.9	31.1	100	33.8	66.2	100
Human health and social work activities	43.9	56.1	100	24.1	75.9	100
Arts entertainment and recreation	76.7	23.3	100	16.7	83.3	100
Other service activities	53.1	46.9	100	14.7	85.3	100
Activities of household as employers	35.6	64.4	100	37.1	62.9	100
Activities of extraterritorial organizations and bodies	72.7	27.3	100	10.7	89.3	100

Table 10.11a Percentage distribution of the employed population aged 15+ years by main employer, sex and place of residence

	Sex			Place of residence		
Main Employer	Male	Female	Total	Rural	Urban	Total
Total	100	50.3	49.7	100	64.3	35.7
Government	100	71.1	28.9	100	23.8	76.2
Parastatal / Quasi Government	100	63.7	36.3	100	43.7	56.3
Self employed	100	47.5	52.5	100	69.1	30.9
International Non-Governmental Org.	100	73.5	26.5	100	28.8	71.2
Local Non-Governmental Organization	100	73.7	26.3	100	23.6	76.4
Family member	100	42.8	57.2	100	80.5	19.5
Private enterprises	100	79.7	20.3	100	19.0	81.0
Private household (paid domestic work)	100	58.1	41.9	100	27.5	72.5
Embassy or International Organization	100	61.1	38.9	100	29.0	71.0
Others	100	76.4	23.6	100	35.4	64.6
Don't know	100	57.9	42.1	100	42.3	57.7

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 10.11b Percentage distribution of the employed population aged 15+ years by main employer, sex and place of residence

Main Employer	Sex			Place of residence		
	Male	Female	Total	Rural	Urban	Total
Total	100	100	100	100	100	100
Government	5.4	7.7	3.2	5.4	2.0	11.6
Parastatal / Quasi Government	0.6	0.8	0.4	0.6	0.4	1.0
Self employed	84.7	80.0	89.5	84.7	91.0	73.5
International Non-Governmental Org.	0.7	1.1	0.4	0.7	0.3	1.5
Local Non-Governmental Organization	0.5	0.7	0.2	0.5	0.2	1.0
Family member	3.7	3.2	4.3	3.7	4.6	2.0
Private enterprises	3.6	5.7	1.5	3.6	1.1	8.2
Private household (paid domestic work)	0.2	0.2	0.2	0.2	0.1	0.4

Table 10.11b Percentage distribution of the employed population aged 15+ years by main employer, sex and place of residence (continued)

Main Employer	Sex			Place of residence		
	Male	Female	Total	Rural	Urban	Total
Embassy or International Organization	0.1	0.1	0.1	0.1	0.0	0.2
Others	0.3	0.5	0.2	0.3	0.2	0.6
Don't know	0.1	0.1	0.1	0.1	0.1	0.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

10.5 Unemployed Population

Unemployed persons, together with the employed ones, make up the labour force. These are persons who are not working but actively looking for work. It was shown earlier that, according to the population census, unemployed persons aged 15 years and above constitute three per cent of the labour force. Tables 10.14 a and b present the distribution of the unemployed population aged 15 years and above by district, residence and sex. The Western Area Urban district has the highest proportion of the unemployed with 35 per cent. Kambia and Koinadugu districts have the lowest proportions of unemployed persons in the country, with less than 2 per cent in each of the two districts. There are no significant differences in the proportions between males and females. It is worth noting in Table 10.14b that the proportions of unemployed males are higher than those of unemployed females in all the districts for both urban and rural areas.

Table 10.14a Percentage distribution of the unemployed population aged 15+ years by district, sex and residence

District	Place of Residence								
	Total Country			Rural			Urabn		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Total	112 268	70 873	41 395	27 753	17 047	10 706	84 515	53 826	30 689
Kailahun	2.0	2.1	1.9	3.7	4.0	3.2	1.5	1.5	1.4
Kenema	4.8	4.8	4.7	2.7	2.9	2.3	5.5	5.4	5.6
Kono	6.1	5.7	6.7	10.2	9.8	10.9	4.7	4.4	5.2
Bombali	7.2	7.4	6.8	12.6	13.1	11.8	5.4	5.6	5.0
Kambia	1.5	1.7	1.3	2.8	2.8	2.7	1.1	1.3	0.8

Table 10.14a Percentage distribution of the unemployed population aged 15+ years by district, sex and residence (continued)

District	Place of Residence								
	Total Country			Rural			Urabn		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Port Loko	7.9	8.9	6.2	10.8	12.2	8.6	7.0	7.8	5.4
Tonkolili	5.1	5.2	4.9	11.9	12.0	11.8	2.9	3.1	2.5
Bo	5.9	5.7	6.2	8.0	8.4	7.4	5.2	4.8	5.7
Bonthe	2.0	2.2	1.6	2.3	2.6	2.0	1.9	2.1	1.5
Moyamba	2.0	2.1	1.8	6.6	7.1	5.8	0.5	0.5	0.4
Pujehun	5.5	4.9	6.6	19.2	16.5	23.4	1.0	1.3	0.7
Western Area Rural	13.2	13.6	12.6	5.7	5.0	6.7	15.7	16.3	14.7
Western Area Urban	35.4	34.2	37.3	0.0	0.0	0.0	47.0	45.1	50.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 10.14b Percentage distribution of the unemployed population aged 15+ years by district, sex and residence

District	Place of Residence								
	All Residences			Rural			Urabn		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Total	112 268	63.1	36.9	27 753	61.4	38.6	84 515	63.7	36.3
Kailahun	2 289	66.5	33.5	1 029	67.1	32.9	1 260	66.0	34.0
Kenema	5 367	63.4	36.6	737	66.1	33.9	4 630	63.0	37.0
Kono	6 800	59.2	40.8	2 835	58.8	41.2	3 965	59.5	40.5
Bombali	8 043	65.2	34.8	3 497	63.9	36.1	4 546	66.2	33.8
Kambia	1 733	69.6	30.4	766	62.9	37.1	967	74.9	25.1

Table 10.14b Percentage distribution of the unemployed population aged 15+ years by district, sex and residence (continued)

District	Place of Residence								
	All Residences			Rural			Urban		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Port Loko	8 877	70.9	29.1	2 994	69.3	30.7	5 883	71.7	28.3
Tonkolili	5 722	64.8	35.2	3 312	61.8	38.2	2 410	68.8	31.2
Bo	6 587	61.2	38.8	2 221	64.3	35.7	4 366	59.6	40.4
Bonthe	2 227	70.0	30.0	652	67.9	32.1	1 575	70.9	29.1
Moyamba	2 236	67.1	32.9	1 840	66.2	33.8	396	71.5	28.5
Pujehun	6 199	56.2	43.8	5 319	52.8	47.2	880	76.9	23.1
Western Area Rural	14 838	64.7	35.3	1 579	54.3	45.7	13 259	66.0	34.0
Western Area Urban	39 718	61.1	38.9	0	0.0	0.0	39 718	61.1	38.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

10.5.1 Employment status of the unemployed population

Information on the unemployed population aged 15 years and above by employment status is presented in Table 10.15. There are only two categories of employment status for the unemployed. These are:

i. Those who worked before and are currently looking for work, and
ii. Those who are looking for work for the first time.

The proportions of those who are looking for work for the first time heavily outnumber those who have worked before and are currently unemployed. This phenomenon is observed across all the districts and is also the same for both males and females. The Western Area Urban district again leads with the highest proportions for the whole country.

Table 10.15 Percentage distribution of the unemployed population aged 15 years and above by employment status, sex and district

Employment status	Districts							
	Total	Kailahun	Kenema	Kono	Bombali	Kambia	Koinadugu	Port Loko
Total								
Total	112 268	2 289	5 367	6 800	8 043	1 733	1 632	8 877
Worked before but currently looking for work	19.2	21.5	17.9	15.4	16.3	13.0	16.3	15.7
Looking for work for the first time	80.8	78.5	82.1	84.6	83.7	87.0	83.7	84.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male								
Worked before but currently looking for work	21.8	22.7	21.1	19.2	19.4	14.0	18.3	17.9
Looking for work for the first time	78.2	77.3	78.9	80.8	80.6	86.0	81.7	82.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Female								
Worked before but currently looking for work	14.8	18.9	12.3	10.0	10.4	10.8	13.0	10.5
Looking for work for the first time	85.2	81.1	87.7	90.0	89.6	89.2	87.0	89.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 10.15 Percentage distribution of the unemployed population aged 15 years and above by employment status, sex and district (continued)

Employment status	Districts						
	Tonkolili	Bo	Bonthe	Moyamba	Pujehun	Western Area Rural	Western Area Urban
Total							
Total	5 722	6 587	2 227	2 236	6 199	14 838	39 718
Worked before but currently looking for work	19.1	23.7	15.0	15.0	13.8	17.6	22.9
Looking for work for the first time	80.9	76.3	85.0	85.0	86.2	82.4	77.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male							
Worked before but currently looking for work	22.0	25.7	13.7	16.7	16.3	20.1	26.1
Looking for work for the first time	78.0	74.3	86.3	83.3	83.7	79.9	73.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Female							
Worked before but currently looking for work	13.8	20.5	18.0	11.6	10.7	13.1	17.9
Looking for work for the first time	86.2	79.5	82.0	88.4	89.3	86.9	82.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

10.6 Economic characteristics of the population aged 10-14 years

The percentage distribution of the population aged 10-14 years by economic activity status is presented in Tables 10.17 a and b. For the country as a whole, those not in the labour force dominate. The same phenomenon applies to all the regions. More than three-quarters of those aged 10-14 years are not in the labour force. The proportion employed is 17 per cent for the total country and ranges from 4 per cent in the Western Region to 22 per cent in the Northern Region. The same pattern can be observed in both urban and rural areas. The Northern Region has the highest proportion of the employed with 47 per cent, while the Western Region has the lowest proportion of 5 per cent. It should be noted that the Western Region Urban has relatively high proportions of employment status categories as compared to the urban areas of the other regions.

Table 10.17a Percentage distribution of the population aged 10 -14 years by economic activity status, region, district and residence

Region/ District/ Place of residence	Sex/ Economic activity status							
	Both Sexes				Male			
	Total	Employed	Unemployed	Not in labour force	Total	Employed	Unemployed	Not in labour force
Region								
Total	846 137	16.8	0.7	82.4	430 883	18.4	0.8	80.9
Eastern	204 173	18.3	0.5	81.2	104 075	20.2	0.5	79.3
Northern	305 679	22.0	0.7	77.4	161 087	22.5	0.7	76.8
Southern	169 936	18.5	0.7	80.7	87 877	21.3	0.8	78.0
Western	166 349	3.9	1.2	95.0	77 844	4.1	1.3	94.6
District								
Total	846 137	16.8	0.7	82.4	430 883	18.4	0.8	80.9
Kailahun	67 127	17.7	0.4	81.9	34 964	19.2	0.4	80.4
Kenema	71 638	17.8	0.3	81.8	36 144	20.9	0.3	78.8
Kono	65 408	19.4	0.8	79.8	32 967	20.4	0.8	78.8
Bombali	73 865	15.2	0.6	84.2	38 412	15.8	0.7	83.5
Kambia	39 523	21.0	0.6	78.4	21 006	20.7	0.6	78.6
Koinadugu	57 254	36.1	0.4	63.5	30 339	37.0	0.5	62.6
Port Loko	72 666	15.6	0.7	83.8	38 130	15.7	0.7	83.6
Tonkolili	62 371	25.1	0.9	74.0	33 200	25.9	0.9	73.2
Bo	67 390	14.6	0.3	85.1	33 692	17.1	0.3	82.6
Bonthe	23 291	23.1	0.4	76.6	12 212	26.5	0.5	73.0
Moyamba	35 102	23.6	0.4	76.0	18 864	26.5	0.4	73.1
Pujehun	44 153	18.1	1.8	80.1	23 109	20.3	1.9	77.8
Western Area Rural	50 934	5.1	1.4	93.5	24 516	5.6	1.6	92.9
Western Area Urban	115 415	3.3	1.1	95.6	53 328	3.4	1.2	95.4
Place of Residence								
Total	846 137	3.3	1.1	95.6	430 883	18.4	0.8	80.9
Rural	498 240	25.1	0.6	74.3	265 084	26.4	0.6	73.0
Urban	347 897	5.0	0.9	94.1	165 799	5.5	1.0	93.5

Table 10.17a Percentage distribution of the population aged 10 -14 years by economic activity status, region, district and residence (continued)

Region/ District/ Place of residence	Sex/ Economic activity status			
	Female			
	Total	Employed	Unemployed	Not in labour force
Region				
Total	415 254	15.3	0.7	84.0
Eastern	100 098	16.4	0.5	83.1
Northern	144 592	21.4	0.6	78.0
Southern	82 059	15.6	0.7	83.7
Western	88 505	3.6	1.0	95.3
District				
Total	415 254	15.3	0.7	84.0
Kailahun	32 163	16.1	0.3	83.5
Kenema	35 494	14.7	0.3	85.0
Kono	32 441	18.4	0.8	80.7
Bombali	35 453	14.6	0.5	84.9
Kambia	18 517	21.4	0.6	78.1
Koinadugu	26 915	35.1	0.4	64.5
Port Loko	34 536	15.4	0.6	84.0
Tonkolili	29 171	24.3	0.9	74.8
Bo	33 698	12.1	0.3	87.6
Bonthe	11 079	19.2	0.3	80.4
Moyamba	16 238	20.3	0.3	79.4
Pujehun	21 044	15.6	1.7	82.7
Western Area Rural	26 418	4.7	1.2	94.2
Western Area Urban	62 087	3.2	1.0	95.8
Place of Residence				
Total	415 254	15.3	0.7	84.0
Rural	233 156	23.6	0.6	75.8
Urban	182 098	4.5	0.8	94.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 10.17b Percentage distribution of the population aged 10 – 14 years by economic activity status, region, district and residence

Region/ District/ Place of residence	Sex/ Economic activity status							
	Both Sexes				Male			
	Total	Employed	Unemployed	Not in labour force	Total	Employed	Unemployed	Not in labour force
Total	846 137	142 476	6 197	697 464	430 883	79 076	3 339	348 468
Eastern	24.1	26.2	16.3	23.8	26.5	26.5	16.3	23.8
Northern	36.1	47.2	32.2	33.9	45.8	45.8	32.2	33.9
Southern	20.1	22.1	19.9	19.7	23.6	23.6	19.9	19.7
Western	19.7	4.5	31.6	22.7	4.0	4.0	31.6	22.7
District								
Total	846 137	142 476	6 197	697 464	430 883	79 076	3 339	348 468
Kailahun	7.9	8.4	3.9	7.9	8.5	8.5	3.9	7.9
Kenema	8.5	9.0	4.0	8.4	9.5	9.5	4.0	8.4
Kono	7.7	8.9	8.5	7.5	8.5	8.5	8.5	7.5
Bombali	8.7	7.9	7.2	8.9	7.7	7.7	7.2	8.9
Kambia	4.7	5.8	3.8	4.4	5.5	5.5	3.8	4.4
Koinadugu	6.8	14.5	4.0	5.2	14.2	14.2	4.0	5.2
Port Loko	8.6	7.9	8.1	8.7	7.6	7.6	8.1	8.7
Tonkolili	7.4	11.0	9.1	6.6	10.9	10.9	9.1	6.6
Bo	8.0	6.9	3.5	8.2	7.3	7.3	3.5	8.2
Bonthe	2.8	3.8	1.5	2.6	4.1	4.1	1.5	2.6
Moyamba	4.1	5.8	2.1	3.8	6.3	6.3	2.1	3.8
Pujehun	5.2	5.6	12.8	5.1	5.9	5.9	12.8	5.1
Western Area Rural	6.0	1.8	11.2	6.8	1.7	1.7	11.2	6.8
Western Area Urban	13.6	2.7	20.4	15.8	2.3	2.3	20.4	15.8
Place of Residence								
Total	846 137	142 476	6 197	697 464	430 883	79 076	3 339	348 468
Rural	58.9	87.8	49.4	53.1	88.4	88.4	49.4	53.1
Urban	41.1	12.2	50.6	46.9	11.6	11.6	50.6	46.9

Table 10.17b Percentage distribution of the population aged 10 – 14 years by economic activity status, region, district and residence (continued)

Region/ District/ Place of residence	Sex/ Economic activity status			
	Female			
	Total	Employed	Unemployed	Not in labour force
Region				
Total	415 254	63 400	2 858	348 996
Eastern	24.1	25.8	17.6	23.8
Northern	34.8	48.9	30.9	32.3
Southern	19.8	20.2	19.1	19.7
Western	21.3	5.1	32.4	24.2
District				
Total	415 254	63 400	2 858	348 996
Kailahun	7.7	8.2	3.8	7.7
Kenema	8.5	8.2	4.2	8.6
Kono	7.8	9.4	9.5	7.5
Bombali	8.5	8.2	6.3	8.6
Kambia	4.5	6.2	3.7	4.1
Koinadugu	6.5	14.9	3.7	5.0
Port Loko	8.3	8.4	7.5	8.3
Tonkolili	7.0	11.2	9.5	6.2
Bo	8.1	6.4	3.6	8.5
Bonthe	2.7	3.4	1.2	2.6
Moyamba	3.9	5.2	1.9	3.7
Pujehun	5.1	5.2	12.4	5.0
Western Area Rural	6.4	1.9	10.8	7.1
Western Area Urban	15.0	3.1	21.6	17.0
Place of Residence				
Total	415 254	63 400	2 858	348 996
Rural	56.1	86.9	48.6	50.6
Urban	43.9	13.1	51.4	49.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

10.7 Conclusion

This analytical report on economic characteristics is based on the data collected during the Sierra Leon 2015 Population and Housing Census. It has not been possible to make any comparisons with the last censuses due to age differences of the target population group under consideration. This report has attempted to highlight the economic characteristics of the population aged 10 years and above, but with emphasis on those aged at least 15 years. It provides a picture of the situation at the time of the census. It does not provide any explanations or answers on why or how, since such detailed information was not collected. However, the inter-censal demographic and health surveys usually collect such detailed information and may provide some answers.

Summary

Information on economic activity targeted all persons aged 10 years and above. The reference period relating to economic activity was 12 months prior to the census.

The economic characteristics of the population include, among other things, labour force, employment and unemployment.

The labour force is made up of the employed and the unemployed.

Economically active persons are those aged 15 years and above engaged in any economic activity, either as paid employees, self-employed, unpaid family workers and those looking for work.

Economically inactive persons are those aged 15 years and above who are neither working nor looking for work, full-time student, retired/ pensioner, totally impaired, or caring for family members.

An employed person is one aged 15 years and above who did any work regularly during the month prior to the census.

An unemployed person is one aged 15 years and above who is not working, available for work, and or actively looking for work.

Employment status is classified as paid employee, self-employed and unpaid family worker.

Paid employee is one working for others and is paid in cash or in kind.

Self-employed is one working for himself/herself. The economic activity status of the population aged 15 years and above is made up of the employed, unemployed and those not in the labour force. According to the census, 62 per cent were employed, 3 per cent unemployed and 35 per cent not in the labour force. There were slight differences between males and females. In the case of the employed, the proportion of employed males was 65 per cent compared to 60 per cent for females. For the unemployed, the proportion for males was 4 per cent while that for females was 2 per cent.With regard to those not in the labour force, the proportions for males and females were 32 and 38 per cent respectively.

In the economically active population, the proportions by region range from 20 to 36 per cent respectively for the Southern and Northern regions with slight differences between males and females. At district level, the percentages of economically active population are all in one-digit figures except for the Western Area Urban where it is 15.

The distribution of the economically active population by age group and sex indicate that the proportions for males in the younger age groups, 15-34, are higher for males than for females, while the opposite is the case for the older age groups. The Refined Activity Rate, an indicator of the level and extent of employment, which relates the labour force to the population in the working age, is higher for males than for females in all the districts except Konaidugu.

On the employed population:

More than three-quarters of this population are self-employed without employees. Two-thirds of them are in rural areas.

Three-quarters of the paid employed population are in urban areas.Nearly two-thirds of the paid employees have no education – there is significant difference between males and females.

More than three-quarters of employed population in rural areas have no education.

Nearly six out of ten of all employed persons are agricultural and fishery workers.

Crop farming is the dominant industry with 56 per cent of all employees, 61 and 52 per cent of males and females respectively.

Between eight and nine out of ten employees are self-employed.

The Western Area Urban district has the highest proportion of the unemployed with 35 per cent. Kambia and Konaidugu districts have the lowest proportions of below 2 per cent each.

The proportion of those looking for work for the first time heavily outnumbers those who have worked before. Most children aged 10-14, are not in the labour force.

CHAPTER 11: HOUSING CONDITIONS

11.1 Introduction

Since independence in 1961, the Government of Sierra Leone has taken responsibility for providing its people with adequate housing. It continued pre-independence programmes but also introduced new initiatives of its own. This is evidenced by the numerous plans, policies and programmes for housing development in the country. Notable ones include: The Kissy Low-Cost Housing Estate (1957 to 1963); the 1963 Borys Plan; the 1974 National Plan and the Five Year National Development Plan; the establishment of the Sierra Leone Housing Corporation (SALHOC), with responsibility for a low-cost housing scheme; the 2003 Vision 2025 (Sierra Leone Government, 2006, p.6); the 2006 Revised National Housing Policy; and the Sierra Leone National Housing Programme (2006-2016).

The genesis of these policies and programmes, the philosophy behind them, the roles played by government, local and international institutions have been documented, and their impact assessed and well-articulated by Rogers (2012). However he does note the lack of detailed data for a thorough evaluation.

Data collection on housing started as far back as 1985, when questions on housing conditions were first included in the population census. Due to the civil war, there was no census in 1990, but in the 2004 Census these questions were expanded. The current (2015) census has again seen further enhancement in the data items collected. These data are essential for evaluation of government plans on housing.

11.2 Data sources and limitations of study

The 2015 Census data on housing conditions were provided by Statistics Sierra Leone (SSL), while data for 1985 and 2004 were obtained from census reports for the respective years. The detailed items of information collected in each census are shown in Table 11.1. In 1985, only six data items, mainly on characteristics of dwelling unit (see table) were collected. Subsequent censuses collected new data items (including type of dwelling unit, repair needs of dwelling unit and number of rooms) and more detailed data on some existing items such as water. In 2015, information was sought on sources of water supply for drinking and also for domestic use. In the previous censuses, data had only been collected on source of water supply and source of drinking water in 1985 and 2004 respectively. These additional data items provide the opportunity for a more detailed assessment of the housing conditions and quality of life of the population. This information has obvious implications for the design, implementation, monitoring and evaluation of policies and programmes aimed at improving living standards. The report analyses and discusses housing characteristics of households by region and place of residence. Trend analysis over the 30 year period (1985, 2004 and 2015) for the entire country is attempted wherever the data permit (data are available and definitions have remained consistent).

Table 11.1 Housing data items collected in population and housing censuses 1985, 2004 and 2015

Data item	Census Year		
	1985	2004	2015
Type of dwelling unit		+	=
Tenure status	#	+	=
Repair needs of dwelling unit		+	=
Number of rooms occupied by household		+	=
Beds with mosquito nets		+	=
Major materials for construction of dwelling unit, roof, wall, floor	#	+	=
Method of refuse disposal		+	=
Principal supply of fuel for cooking	#	+	=
Principal supply of fuel for lighting	#	+	=
Principal source of water supply	#		
Principal source of water supply for drinking		+	=
Principal source of water supply for household use			=
Type of toilet facility	#	+	=
Type of bathing facility		+	=
Household main source of information		+	=
Distance of household from nearest			
Health facility		+	=
Primary school		+	=
Source of water		+	=

#: Data item collected in 1985
+: Data item collected in 2004
=: Data item collected in 2015

Source: Compiled from 1985, 2004 and 2015 Census Questionnaires.
The Analytical Report, 1985 PHC, Sierra Leone, Central Statistics Office.
Statistics Sierra Leone, 2015.

11.3 Definition of concepts

Dwelling unit refers to the space occupied by a household – its living quarters. A living quarter is a structurally separate and independent place of abode. It could be a building or some form of space or shelter arranged for human habitation which was occupied at the time of the census (for example, a hut or group of huts). Different types of dwelling units were identified and defined as follows:

• Separate house: a building consisting of a single detached housing unit (two or single storey) or a single detached living quarter.
• Semi-detached house: a single housing unit attached to another single housing unit. The adjoining housing units would usually have a common dividing wall which extends from ground to roof. Row houses are included in this category. This could be single or storey building.
• Flat/apartment: a dwelling/living quarters located in a building, which contains several sets of housing units. The flat/apartment building usually consists of several floors. The housing units are accessed by a common stairway.
• Compound house (rooms): living quarters (room or set of rooms) which are located within a compound, typically referred to as compound house. (A compound need not be surrounded by a wall, fence or hedge).
• Huts/buildings: living quarters made up of a group of huts or buildings which are being used as the place of abode by one or more households. They may be located on the same compound or on different compounds.
• Tent: a moveable shelter made of cloth supported by a framework of poles and ropes, used especially by campers, Red Cross men/ women or refugees.
• Improvised home (for example, kiosk/ container): an improvised housing unit is an independent makeshift shelter or structure built of materials such as wood, metal, cardboard or plastic sheets and without a predetermined plan, for the purpose of habitation, which is used as living quarters. Included in this category are squatters' huts, kiosks, containers as well as any similar premises arranged and used as living quarters, which does not comply with generally accepted standards of habitation. This type of housing unit is usually found in urban and sub-urban areas, particularly at the peripheries of principal cities.
• Uncompleted building: a building or structure that has not been completed but which provides shelter for some households.
• Living quarters attached to/inside work units such as shops or offices: housing units that are located in buildings that have not been built or constructed for human habitation but which are actually in use as living quarters at the time of the census. They include housing units in corn milling structures, warehouses, offices and shops. Premises that have been converted for human habitation, although not initially designed/constructed for this purpose, must not be included in this category, for example, an old school block or cocoa shed that has been converted into living quarters.
• Other (specify): if a type of dwelling/living quarters does not fall into any of the above categories it must be noted in this space. Dilapidated buildings marked for demolition but which are still inhabited, caves and other natural shelters fall within this category.
• Rooms occupied include sleeping rooms and the sitting rooms (parlour). They do not include kitchens or stores.
• A household is defined as a person or group of persons who normally eat and live together and recognize a particular person as the head. A household may occupy a whole building, part of a building or many buildings. A man with several wives might maintain separate living quarters for his wives and their children. In such cases each wife and her children should be enumerated as a separate household.

11.4 Housing stock

The number of houses available for the population and its growth over time provides information for assessing the effectiveness of housing policies. Table 11.2 presents data on the housing stock, households and household characteristics. There was a total of 801,417 houses in the country in 2015. One third of these houses were in the Northern Region, despite it having the lowest population density of 70 persons per square kilometre. The percentages of housing stock were evenly distributed, about 23, 22 and 21 for Southern, Eastern and Western regions respectively. The Western Region had the lowest proportion of houses, even though it was the most densely populated with 2,693 persons per square kilometre. This is indicative of acute housing needs in this region.

The distribution by place of residence shows that 61 per cent of houses were in rural areas with 39 per cent in urban areas. A similar but more pronounced variation is observed in the rural-urban distribution of houses in the regions. The percentages were 67.9, 76.2 and 82.6 for rural areas in Eastern, Northern and Southern regions respectively, with the Western Region being the exception. Only four per cent of houses in the Western Region were in rural locations.

Over the 30 year period, the number of households has more than doubled (261 per cent). It increased from 485,711 in 1985 to 819,848 in 2004 and to 1,265,468 in 2015. The average household size for the country however declined consistently from 6.6 in 1985, to 6.0 in 2004 and 5.6 in 2015. The average household size for the regions did not differ much from the national average apart from the Western Region which recorded the smallest average household size of 4.7.

Table 11.2 Number of houses, households and household characteristics by region

Household characteristics	Total country			Household characteristics	Place of Residence 2015	
	1985	2004	2015		Rural	Urban
Total population	3,515,812	4,976,871	7,092,113	Total population	4,187,016	2,905,097
Total household population	3,211,239	4,930,532	7,076,119	Total household population	4,182,612	2,893,507
Number of houses			801,417	Number of houses	485,616	315,801
Number of households	485,711	819,848	1,265,468	Number of households	697,734	567,734
Rural houses			485,616	Rural houses	485,616	N/A
Percentage of land area	100.0	100.0	100.0	Percentage of land area	N/A	N/A
Population density (persons per km sq.)	49.0	69.0	99.0	Population density (persons per km sq.)	N/A	N/A
Percentage distribution of houses	100.0	100.0	100.0	Percentage distribution of houses	60.6	39.4
Rural share of housing stock	*	*	60.6	Rural share of housing stock	100	0
Households per house	*	*	1.6	Households per house	1.4	1.8
Average household size	6.60	6.00	5.6	Average household size	6	5.1
Average (mean) persons per house	*	*	8.8	Average (mean) persons per house	8.6	9.2

N/A Not applicable. * Data not available.

Sources: [1] Statistics Sierra Leone, 2015 Population and Housing Census.

[2] Statistics Sierra Leone (2006), Final Results. 2002 Population and Housing Census

[3] Statistics Sierra Leone, Republic of Sierra Leone, 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics

[4] Central Statistics Office, The Analytical Report. 1985 Population and Housing Census, Sierra Leone

Table 11.2 Number of houses, households and household characteristics by region (continued)

Household characteristics	Region 2015			
	Eastern	Northern	Southern	Western
Total population	1,642,370	2,508,201	1,441,308	1,500,234
Total household population	1,640,592	2,502,583	1,439,165	1,493,779
Number of houses	174,687	275,225	182,075	169,430
Number of households	281,201	414,377	248,655	321,235
Rural houses	118,689	209,749	150,320	6,858
Percentage of land area	21.7	50.0	27.5	
Population density (persons per km sq.)	106.00	70.0	73.0	0.8
Percentage distribution of houses	21.8	34.3	22.7	269.3
Rural share of housing stock	67.9	76.2	82.6	21.1
Households per house	1.6	1.5	1.4	4
Average household size	5.8	6.0	5.8	1.9
Average (mean) persons per house	9.4	9.1	7.9	4.7

N/A Not applicable. * Data not available.

Sources:

[1] Statistics Sierra Leone, 2015 Population and Housing Census.

[2] Statistics Sierra Leone (2006), Final Results. 2002 Population and Housing Census

[3] Statistics Sierra Leone, Republic of Sierra Leone, 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics

[4] Central Statistics Office, The Analytical Report. 1985 Population and Housing Census, Sierra Leone

11.5 Type of dwelling unit, tenure and current repair needs

11.5.1 Type of dwelling unit

More than half (54.2 per cent) of the dwelling units were separate houses, one fifth (20.6 per cent) were flats/apartments, one in 10 (10.4 per cent) were compound houses and seven per cent were semi-detached houses (Table 11.3). Households living in improvised homes constituted 2.2 per cent and those in uncompleted buildings were 0.7 per cent of all households.

A comparison of the 2015 and 2004 data is not possible because of differences in definition of "type" of dwelling unit in the two censuses. In 2004, type of dwelling was defined by number of units and number of storeys in the dwelling unit namely (single unit, one storey; multiple unit, one storey; single unit, two-storey; multiple unit, two-storey; single unit, three or more storey; multiple unit, three of more storey) which is different from the categories for type of dwelling units in the 2015 Census.

Table 11.3 Type of dwelling unit by region and place of residence

Type of dwelling		Region				Place of residence	
	Total	Eastern	Northern	Southern	Western	Rural	Urban
Number	1,265,468	281,201	414,377	248,655	321,235	697,734	567,734
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Separate house	54.2	65.8	61.3	65.0	26.3	67.6	37.7
Semi-detached house	7.0	6.6	4.9	5.6	11.3	4.5	10.2
Flat/apartment	20.6	14.4	18.6	17.0	31.7	15.1	27.4
Compound house (rooms)	10.4	8.2	7.1	7.4	18.8	5.5	16.3
Huts/buildings (same compound)	2.4	1.8	3.2	2.1	2.3	2.8	2.0
Huts/buildings (different compound)	1.4	1.6	2.3	1.3	0.2	2.4	0.2
Tent	0.8	0.6	1.5	0.6	0.2	1.1	0.5
Improvised home (kiosk container board pan-body)	2.2	0.3	0.4	0.4	7.5	0.3	4.5
Uncompleted building	0.7	0.4	0.6	0.5	1.5	0.5	1.0
Other	0.2	0.3	0.2	0.3	0.2	0.2	0.2

Sources:

[1] Statistics Sierra Leone, 2015 Population and Housing Census.

[2] Statistics Sierra Leone. (2006) Final Results, 2004 Population and Housing Census.

[3] Statistics Sierra Leone, Republic of Sierra Leone, 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics

[4] Central Statistics Office, The Analytical Report. 1985 Population and Housing Census of Sierra Leone.

11.5.2 Tenure

Tenure provides security of abode and peace of mind. Data on tenure are available for 1985, 2004 and 2015 population and housing censuses. Tenure status and current repair needs by region, place of residence and census year are shown in Table 11.4. The table shows that in 2015, the two leading types were owner occupier (71.1 per cent) and renting (23.8 per cent). Employer-provided housing contributed less than two per cent of accommodation needs of the population in 2015. The pattern of tenure status has been erratic over the 30 year period.

Table 11.4 shows that in 2015, 48.7 per cent of households owned and constructed the houses they lived in while 20.3 per cent of households owned but inherited their homes. Purchased homes accounted for a small proportion of 2.1 per cent. Owner-constructed houses was the only category that showed a consistent increase over the 30-year period, with 44.6 per cent, 45.5 per cent and 48.7 per cent in 1985, 2004 and 2015 respectively. The percentage of households renting private accommodation decreased from 25.8 in 1985 to 17.2 in 2004 and increased to 20.9 in 2015. Most of the renting was done on a private basis, with government and the housing corporation contributing a small fraction (less than one per cent) except for 2015 when the share of the housing corporation increased to 2.2 per cent.

The regional pattern is not different from the national, except for the Western Region, where more than half (54.1 per cent) of the households were renting and were doing so privately (48.8 per cent). The Western Region also had the highest proportion (3.6 per cent) of its dwelling units being rental units belonging to the housing corporation. The percentage of owner-occupied houses in the Western Region (38.9 per cent) was about half of the percentage for the other three regions, but had the highest percentage of owner-purchased (3.7 per cent) and employer provided (2.7 per cent) homes.

There are wide variations in tenure status by place of residence. In the rural areas, the percentage of owner-occupied was over 90 per cent compared to less than 50 per cent in the urban areas; whilst nearly half (46.1 per cent) of urban households were renting, less than 6 per cent did the same in the rural areas.

The repair needs of dwelling units provide an indication of their condition. The data in Table 11.4 suggest that the condition of homes in 2015 was better than in 2004. The proportion of households in dwelling units that required any repairs nearly doubled (increased from 10 percent in 2004 to 19 percent in 2015). The percentage of households that required minor repairs declined from 59 to 49.3, while units needing major repairs or rehabilitation increased by nearly 6 per cent (24 per cent in 2004 to 29.8 per cent in 2015); and dwelling units that needed reconstruction declined from 8 per cent in 2004 to 1.3 per cent in 2015.

Table 11.4 also shows the repair needs of dwelling units in the regions. The percentages of household dwelling units with several types of repair needs were almost the same in the three regions with the Western Region being the exception. The percentage of households living in dwelling units requiring no repairs in the Western Region was 33 per cent which was more than double that for Eastern, Northern and Southern regions (13 per cent, 15 per cent and 14 per cent respectively). For units requiring minor and major repairs, the Western Region had lower percentages than the other three regions although the differences were less pronounced.

Table 11.4 shows that dwelling units of urban households were in a better condition than those of rural households. The percentage of dwelling units for rural households (11.2 per cent) that did not require any repairs was less than half the percentage for urban household dwelling units (28.5 per cent) in the same category. The percentage of dwelling units requiring major repairs or rehabilitation was higher for rural households than for urban households by 14.5 percentage points. The percentage of dwelling units requiring reconstruction was also higher for rural households by 0.2 percentage points.

Table 11.4 Tenure status and current repair needs by region and place of residence

Ownership status/repair needs	Total country		
	1985	2004	2015
Number	485,711	819,848	1,265,468
Total	100.0	100.0	100.0
Owner	67.9	75.1	71.1
Owner-purchased	2.2	1.6	2.1
Owner-constructed	44.6	45.5	48.7
Owner-inherited	21.1	28.0	20.3
Employer provided	2.6	3.2	1.8
Employer-government	1.3	1.5	1.1
Employer-private	1.3	1.2	0.7
Employer-para-statal/quasi-government	*	0.4	0.1
Renting	26.9	19.3	23.8
Renting government	0.9	0.2	0.7
Renting housing corporation	0.2	0.5	2.2
Renting private	25.8	17.2	20.9
Renting-para-statal/quasi-government	*	1.4	0.1
Other		2.4	3.2
Squatter	*	0.5	0.7
Other	2.7	1.9	2.5
Repair needs			
Total		100.0	100.0
No repairs	#	10.0	19.0
Minor repairs	#	59.0	49.3
Major repairs/ rehabilitation	#	24.0	29.8
Reconstruction	#	8.0	1.3
Not stated	#	*	0.6

Ownership status/repair needs	Place of residence 2015	
	Rural	Urban
Number	697,734	567,734
Total	100.0	100.0
Owner	90.3	47.5
Owner-purchased	1.4	3.0
Owner-constructed	64.6	29.2
Owner-inherited	24.4	15.3
Employer provided	1.2	2.7
Employer-government	0.6	1.6
Employer-private	0.5	0.9
Employer-para-statal/quasi-government	0.1	0.1
Renting	5.7	46.1
Renting government	0.3	1.2
Renting housing corporation	1.0	3.5
Renting private	4.3	41.3
Renting-para-statal/quasi-government	0.0	0.1
Other	2.7	
Squatter	0.5	0.9
Other	2.2	2.9
Repair needs		
Total	100.0	100.0
No repairs	11.2	28.5
Minor repairs	50.5	47.9
Major repairs/ rehabilitation	36.3	21.8
Reconstruction	1.4	1.2
Not stated	0.6	0.6

Table 11.4 Tenure status and current repair needs by region and place of residence (continued)

Ownership status/repair needs	Region 2015			
	Eastern	Northern	Southern	Western
Number	281,201	414,377	248,655	321,235
Total	100.0	100.0	100.0	100.0
Owner	78.4	84.5	82.3	38.9
Owner-purchased	1.4	1.5	1.7	3.7
Owner-constructed	53.3	62.5	53.6	23.2
Owner-inherited	23.6	20.5	27.1	12.0
Employer provided	1.4	1.6	1.6	2.7
Employer-government	0.8	1.0	1.1	1.5
Employer-private	0.5	0.6	0.5	1.1
Employer-para-statal/quasi-government	0.1	0.1	0.1	0.1
Renting	17.7	10.8	13.4	54.1
Renting government	0.4	0.5	0.4	1.5
Renting housing corporation	1.9	1.6	1.5	3.6
Renting private	15.2	8.7	11.5	48.8
Renting-para-statal/quasi-government	0.1	0.0	0.0	0.2
Other	2.6	3.1	2.6	4.3
Squatter	0.5	0.7	0.5	0.9
Other	2.1	2.4	2.1	3.4
Repair needs				
Total	100.0	100.0	100.0	100.0
No repairs	13.2	14.9	14.2	33.0
Minor repairs	52.2	50.3	50.9	44.5
Major repairs/ rehabilitation	33.3	32.6	33.3	20.3
Reconstruction	1.0	1.4	1.1	1.6
Not stated	0.4	0.8	0.5	0.6

Category not used

Data not collected in 1985

Sources:

[1] Statistics Sierra Leone, 2015 Population and Housing Census.

[2] Statistics Sierra Leone. (2006) Final Results. 2002 Population and Housing Census

[3] Statistics Sierra Leone, Republic of Sierra Leone, 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics

[4] Central Statistics Office, The Analytical Report. 1985 Population and Housing Census, Sierra Leone

11.6 Room occupancy and beds with mosquito nets

11.6.1 Room occupancy

A critical index of overcrowding is the number of sleeping rooms households occupy. The World Health Organization (WHO) defines overcrowding as "the situation in which more people are living within a single dwelling than there is space for, so that movement is restricted, privacy secluded, hygiene impossible, rest and sleep difficult".

The effects of overcrowding are also well documented: increased physical contact, lack of sleep, lack of privacy, poor hygiene practices and an inability to care adequately for sick household members. Risks due to overcrowding may be classified as physical (spread of infectious diseases), psychological (frustration, anxiety), social (violence) and high morbidity and mortality (USDHUD, 2007).

One of the common indicators of overcrowding is persons per room (PPR). The most often reported standard for PPR is more than 1.5. Table 11.5 gives a PPR of 2.1 for the whole country, with the Northern Region having the lowest (1.8) while the Eastern Region had the highest (2.3). These results are indicative of overcrowding in the entire country with its attendant risks.

Another measure of overcrowding is what the United Nations Stats Millennium Indicator calls 'sufficient living area': "a house is considered to provide a sufficient living area for the household members if not more than three people share the same habitable (minimum of four square meters) room". Using this indicator, 76.2 per cent of households had sufficient living area. It is important to note that this indicator was calculated on the basis of number of rooms available to each household. The size of the room could not be considered because the information was not collected in the 2015 Census. The definition of "habitable" was also not considered in the collection of the data. These limitations of the data may account for the rather high proportion of 76.2 per cent of households observed for this indicator.

Nearly 30 per cent of households occupied one room, one in four occupied two rooms and 18 per cent occupied three rooms. Given an average household size of 5.6 persons, this suggests living conditions are not ideal. The Western Region had the highest proportions of households in fewer rooms, while the Northern Region had less overcrowding. Urban households also appeared to be more constrained than rural households. About 38 per cent of urban households occupied single rooms, compared to 23 per cent for rural households.

Table 11.5 Persons per room and distribution of households by number of rooms, region and place of residence

Persons per room/ number of rooms		Region				Place of residence	
	Total	Eastern	Northern	Southern	Western	Rural	Urban
Persons per room	2.1	2.3	1.8	2.2	2.2	2.0	2.1
No. of households	1,265,468	281,201	414,377	248,655	321,235	697,734	567,734
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of rooms							
1	29.3	29.7	19.2	28.4	42.5	22.5	37.5
2	25.7	27.5	23.0	25.1	28.0	25.0	26.5
3	18.2	19.1	18.0	21.9	14.8	20.4	15.5
4	12.8	13.3	15.1	14.0	8.4	15.0	10.0
5	7.0	6.0	10.9	6.4	3.3	8.7	4.9
6	3.9	2.5	7.5	2.5	1.4	4.9	2.6
7	1.6	0.9	3.3	0.8	0.6	1.9	1.3
8	0.8	0.5	1.6	0.4	0.4	0.9	0.7
9	0.3	0.2	0.6	0.2	0.3	0.3	0.4
10	0.2	0.1	0.3	0.1	0.1	0.2	0.2
10+	0.3	0.2	0.5	0.2	0.3	0.2	0.4

Source: Statistics Sierra Leone, 2015
Population and Housing Census

11.6.2 Ownership of mosquito nets

Malaria is endemic in West Africa and is one of the leading causes of morbidity and mortality (especially among children under 5 years) and of complications in pregnancy in the region. Bennett et. al. (2012) have shown that Sierra Leone is no different in this regard. About half of all health institutional outpatient visits and 38 per cent of hospital admissions are due to malaria. The disease also accounts for 38 per cent of under-five mortality, and one in four of all-age mortality.

The use of mosquito nets, especially insecticide treated nets (ITN) or impregnated mosquito nets (IMN) has been shown to reduce malaria cases in many countries in sub-Saharan Africa (Bennett et. al., 2012). Consequently, malaria intervention programmes such as the Roll Back Malaria Partnership has encouraged widespread use of these nets by the entire population, through free mass distribution. Data on beds with impregnated nets are essential for an evaluation of the impact of this and other programmes.

Data on beds and use of mosquito nets are presented in Tables 11.6. It shows that 40 per cent of beds were in the Northern region with the rest nearly evenly distributed among the other three regions. Rural households accounted for almost 62 per cent of beds. More than half (56 per cent) of all beds in the country had an IMN, while one in four (26.4 per cent) had no nets all. About 18 per cent had regular nets.

Table 11.6 shows that the Southern Region had the highest use (71 percent) of IMN and the lowest proportion (14 percent) of beds with no nets. The Western Region recorded the lowest (37 per cent) percentage of beds with IMN and the highest proportion (46 per cent) of beds with no mosquito nets. There are also differences by place of residence in the use of mosquito nets. The proportion of urban households without an IMN (35 per cent) was one and a half times that of rural households (21 per cent). Sixty two per cent of rural households used an IMN compared to 47 per cent of urban households. The higher levels of ownership among rural households could be down to a campaign in November 2010 which targeted groups with a higher burden of the disease, including rural areas (Bennett et. al., 2012).

Table 11.6 Distribution of beds and use of mosquito nets by region and place of residence

Persons per room/ number of rooms		Region				Place of residence	
	Total	Eastern	Northern	Southern	Western	Rural	Urban
Total beds	3,477,635	745,825	1,397,262	687,906	646,642	2,143,902	1,333,733
Percentage	100.0	21.5	40.2	19.8	18.6	61.7	38.4
Mosquito net status of beds as percentage of total beds							
Impregnated	56.0	60.6	54.9	71.1	37.1	61.7	47.0
Regular	17.6	18.7	18.5	14.9	17.0	17.5	17.7
Beds with no nets	26.4	20.7	26.6	14.0	45.9	20.9	35.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 11.7 shows the percentages of households that own each type and the number of such nets. About 32 per cent do not own an IMN, while one in four households own one IMN. The general pattern is that the biggest proportion of households own no net, followed by ownership of one net, then two and so on – with the smallest proportion of households owning five or more than five nets. The Southern Region and rural areas show a slight deviation from this general pattern. In these areas, the proportion of households owning one impregnated mosquito net is higher than the proportion of households that do not own any of such nets at all. Apart from this, both areas also follow the general pattern noted above.

Table 11.7 Distribution of mosquito nets by region and place of residence

Number of mosquito nets		Region				Place of residence	
	Total	Eastern	Northern	Southern	Western	Rural	Urban
Impregnated nets							
No. of Households	1,265,468	281,201	414,377	248,655	321,235	697,734	567,734
Total	100.0	100.0	100.0	100.0	100.00	100.0	100.00
0	31.6	24.4	26.5	15.1	57.1	21.0	44.6
1	26.7	30.6	23.7	29.4	25.1	25.9	27.6
2	19.1	22.5	2.8	23.9	10.0	23.1	14.1
3	11.6	12.3	12.8	17.4	4.9	15.1	7.2
4	6.2	6.3	7.9	8.8	1.8	8.2	3.6
5	2.8	2.3	4.5	3.5	0.6	3.9	1.5
5+	2.2	1.5	3.9	2.1	0.6	2.8	1.4
Regular net							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.00
0	76.3	74.5	72.1	80.3	80.0	75.0	77.9
1	11.4	12.3	11.5	8.9	12.4	10.7	12.3
2	6.3	7.3	7.8	5.3	4.4	7.1	5.4
3	3.1	3.2	3.9	3.0	1.9	3.7	2.3
4	1.6	1.6	2.3	1.5	0.7	2.0	1.1
5	0.7	0.6	1.2	0.6	0.2	0.9	0.5
5+	0.6	0.5	1.1	0.5	0.3	0.7	0.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

11.7 Major materials for construction of roof, wall and floor

Materials used for the construction of the roof, walls and floor provide an indication of the quality of housing and the extent to which they provide adequate shelter from harsh environmental conditions and the vagaries of the weather.

11.7.1 Materials for roof

A roof provides protection to the structure and to those living inside it. The ability of a roof to perform these functions effectively depends on the type of materials used. Table 11.8 shows that zinc and thatch are the main materials used for roofing in the country and account for more than 90 per cent of household dwelling units in both 2004 and 2015. The quality of materials used for roofing improved between 2004 and 2015. There was an increase in the proportion of households using zinc from 64.9 per cent in 2004 to 81.8 per cent in 2015 and a decline in proportion of households using thatch from 25.9 per cent to 12.8 per cent in 2004 and 2015 respectively.

In the Eastern, Northern and Southern regions zinc and thatch were the dominant types of materials used, accounting for over 95 per cent in each region. The Southern Region had the lowest proportion of households using zinc and the highest proportion using thatch. The Western Region, on the other hand, had nine out of 10 households using zinc, about 5 per cent using concrete, nearly 3 per cent using asbestos and a very small proportion (0.4 per cent) using thatch.

The differences between urban and rural choices of roof were marked. Although zinc was still the leading type of material used by both rural (73.3 per cent) and urban (92.2 per cent) households, thatch roofs were rare (0.7 per cent) in urban households, compared to one in four (22.6 per cent) in rural households. Concrete and asbestos were also used in urban areas.

11.7.2 Materials for wall

The functions of a wall are three fold; to control, support and distribute utilities. The walls control rain water penetration, light, heat flow, solar radiation, ground water, fire, noise, entrance of animals, bugs and odours. Materials used in their construction determine how well they do this.

Table 11.8 shows that the main materials used for walls in 2015 were mud bricks (42.9 per cent), cement blocks (24.8 per cent) and mud and wattle (14.9 per cent), while clay bricks (7.2 per cent) and zinc (6.3 per cent) together were used by more than one in 10 households. Apart from mud and wattle, whose use had declined from 35.1 per cent in 2004 to 14.9 per cent in 2015, there has been in general, an increase in the proportion of households using all the other main types of wall material.

The regions show several differences with respect to construction material for wall. The Southern Region again had the highest percentages of households using the poorer quality materials (39.6 per cent using mud and wattle), and the lowest percentage of households using the better quality materials (13.6 per cent using cement blocks). In the Eastern and Northern regions 51.8 per cent and 63.8 per cent respectively of households had walls made from mud bricks, whilst the majority of households (55.3 per cent) in the Western Region had walls made of cement blocks, followed by zinc (17.5 per cent) and mud bricks (16.3 per cent).

There are large differences between rural and urban areas. The main materials used by rural households were mud bricks (54.9 per cent), mud and wattle (24.9 per cent), clay bricks (6.6 per cent) and cement blocks (6.4 per cent), while the main materials used by urban households were cement blocks (47.3 per cent), mud bricks (28.2 per cent), zinc (10.7 per cent) and clay bricks (8.0 per cent).

Kelly et. al., (2013) have observed that houses built with mud brick or mud and wattle walls are almost 10 times more likely to have multi mammate rat (the common name for rats carrying the Lassa virus) infestation than houses with cement walls. There are high incidence of Lassa fever in rural parts of the Eastern Region.

11.7.3 Materials for floor

Poor quality flooring material exposes household members to the risk of diseases spread by rodents and other pests. The main materials used for the construction of floors in 2015 were mud (46.4 per cent), cement (44 per cent) and tiles (6.4 per cent) while mud (62.6 per cent) and cement (33.4 per cent) were used in 2004. Improvements in the quality of flooring material are seen by the use of mud dropping by 16.2 per cent and cement increasing by 11 per cent between 2004 and 2015. Mud was the main material used by most households in the Eastern (60.7 per cent), Northern (60.3 per cent) and Southern (60.8 per cent) regions. Cement was the second most common material used by a third of households in these three regions.

Kelly et. al., (2013) reported visible rodent burrows in the mud foundation in the exterior and interior of some houses in the Eastern Region. According to them, the presence of Lassa fever (an acute and sometimes severe viral haemorrhagic illness caused by Lassa virus) in the region can be attributed to the presence of disease-carrying rodents in houses. In the Western Region, the main materials used were cement (73 per cent) and tiles (18.9 per cent). The rural households used two main materials, mud (74 per cent) and cement (21 per cent) while urban households used cement (72 per cent), tiles (13 per cent) and mud (12 per cent).

Table 11.8 Construction materials for roof, wall and floor by region and place of residence

Roof/wall/floor			Region				Place of residence	
	2004	2015	Eastern	Northern	Southern	Western	Rural	Urban
Roof								
Number	819,848	1,265,468	281,201	414,377	248,655	321,235	697,734	567,734
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Concrete	1.2	1.6	0.5	0.4	0.4	4.9	0.3	3.1
Asbestos	0.8	2.0	1.9	1.8	1.5	2.7	1.6	2.5
Zinc	64.9	81.8	85.9	79.9	68.7	90.6	73.3	92.2
Thatch	25.9	12.8	10.2	15.3	27.6	0.4	22.6	0.7
Tarpaulin	0.0	1.5	1.2	2.2	1.2	1.2	1.8	1.2
Tiles	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	7.3	0.4	0.2	0.3	0.6	0.3	0.4	0.2

* Category not used in 2004

Sources:

[1] Statistics Sierra Leone, 2015 Population and Housing Census.

[2] Statistics Sierra Leone. (2006) Final Results. 2002 Population and Housing Census.

[3] Statistics Sierra Leone () Republic of Sierra Leone, 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics

Table 11.8 Construction materials for roof, wall and floor by region and place of residence (continued)

Roof/wall/floor			Region				Place of residence	
	2004	2015	Eastern	Northern	Southern	Western	Rural	Urban
Wall								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Stone	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2
Cement blocks	16.6	24.8	15.6	14.0	13.6	55.3	6.4	47.3
Clay bricks	2.4	7.2	9.0	5.7	8.3	6.7	6.6	8.0
Sandcrete	1.4	0.8	0.8	0.5	1.0	0.9	0.6	0.9
Zinc	4.8	6.3	2.5	3.1	1.4	17.5	2.7	10.7
Timber	0.9	0.7	0.6	0.5	0.7	1.3	0.5	1.0
Mud bricks	37.1	42.9	51.8	63.8	32.7	16.3	54.9	28.2
Poles/reed	1.1	0.5	0.5	0.5	0.9	0.1	0.8	0.1
Tarpaulin	0.3	0.9	07	1.6	0.7	0.4	1.2	0.6
Burned bricks	*	0.4	0.7	0.3	0.6	0.1	0.5	0.2
Mud and wattle	35.1	14.9	17.4	9.3	39.6	0.6	24.9	2.5
Other	0.2	0.4	0.3	0.4	0.4	0.5	0.5	0.3
Floor								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Stone	0.1	0.7	0.3	0.7	0.4	1.4	0.5	1.0
Tiles	2.3	6.4	1.8	2.1	2.5	18.9	0.8	13.3
Cement	33.4	44.0	35.0	33.8	33.7	73.0	21.2	72.0
Wood	1.2	2.0	1.9	2.6	2.2	1.0	2.7	1.0
Mud	62.6	46.4	60.7	60.3	60.8	4.9	74.4	12.0
Other	0.3	0.5	0.3	0.4	0.4	0.9	0.4	0.6

* Category not used in 2004

Sources: [1] Statistics Sierra Leone, 2015 Population and Housing Census.

[2] Statistics Sierra Leone. (2006) Final Results. 2002 Population and Housing Census.

[3] Statistics Sierra Leone () Republic of Sierra Leone, 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics

11.8 Access to utilities and household facilities

11.8.1 Source of fuel for cooking

The source of cooking fuel (Table 11.9) show that wood (64.7 per cent) and charcoal (32.2 per cent) were the dominant fuels for cooking in 2015, providing the fuel needs of 96.9 per cent of households. Each of the other sources provided less than 1 per cent of household fuel needs in 2015.

Even though wood was the main source of fuel used by most households in 1985 and 2004, its use had been on the decline from 93.2 per cent in 1985, to 87 per cent in 2004 and 64.7 per cent in 2015. Similarly, the use of kerosene had declined from over four per cent in 1985 and 2004 to less than one per cent in 2015. The use of charcoal however, increased from less than 1 per cent in 1985 to 7.5 per cent in 2004 and over 30 per cent by 2015.

Looking at the country by region, the dominant fuels used for cooking were wood and charcoal. However, in the Eastern, Northern and Southern regions, wood was used by more than 80 per cent of households and charcoal by 17.1 per cent, 15.2 per cent and 11.4 per cent of households respectively. On the other hand, over 80 per cent of households used charcoal in the Western Region and 8.9 per cent of households used wood. The use of gas, electricity and kerosene as supplementary fuels were more popular in the Western Region.

There are wide differences by place of residence. The use of wood was nearly universal (95.7 per cent) by rural households, and only 3 per cent used charcoal. However, two out of three urban households used charcoal and one out of five households used wood, and the remainder used electricity, gas and kerosene.

11.8.2 Source of fuel for lighting

Kerosene was the main source of lighting for eight out of 10 households (84.7 per cent, 85.6 per cent) in 1985 and 2004 respectively. Its use was negligible (1.2 per cent) by 2015. In that year battery/rechargeable light (76.4 per cent) and electricity (17.8 per cent) were the main sources of lighting for households.

Fuel sources for lighting are very similar for Eastern, Northern and Southern regions: over 80 per cent for battery/rechargeable light and about 6 per cent for electricity in each of these regions. The same sources were used in the Western Region but the variation is small (and reversed) with electricity (51.7 per cent) and battery/rechargeable light (43.2 per cent).

Rural-urban differentials persisted for lighting fuel as well. Most rural dwellers (93 per cent) used battery/rechargeable light compared to over half (56.1 per cent) in urban areas. Electricity constituted the second (38.9 per cent) main source of fuel for lighting among urban households compared to 0.7 per cent in rural areas.

Table 11.9 Principal sources of fuel supply for cooking and lighting by region and place of residence

Fuel for cooking/ lighting	Total country		
	1985	2004	2015
Cooking			
Number	485,711	819,848	1,265,468
Total	100.0	100.0	100.0
Electricity	0.3	0.2	0.5
Gas	0.8	0.4	0.8
Kerosene	4.4	4.2	0.7
Charcoal	0.8	7.5	32.2
Wood	93.2	87.0	64.7
Crop residue	*	*	0.1
Saw dust	*	*	0.1
Solar	*	*	0.1
Animal waste	*	*	0.0
Other	0.2	0.7	0.7
Not stated	0.4	*	

Fuel for cooking/ lighting	Place of residence 2015	
	Rural	Urban
Cooking		
Number	697,734	567,734
Total	100.0	100.0
Electricity	0.0	1.1
Gas	0.1	1.7
Kerosene	0.4	1.1
Charcoal	3.0	67.9
Wood	95.7	26.4
Crop residue	0.2	0.1
Saw dust	0.2	0.1
Solar	0.1	0.1
Animal waste	0.1	0.0
Other	0.1	1.5
Not stated		

Fuel for cooking/ lighting	Region 2015			
	Eastern	Northern	Southern	Western
Cooking				
Number	281,201	414,377	248,655	321,235
Total	100.0	100.0	100.0	100.0
Electricity	0.2	0.1	0.2	1.5
Gas	0.2	0.2	0.2	2.6
Kerosene	0.3	0.6	0.4	1.3
Charcoal	17.1	15.2	11.3	83.3
Wood	81.6	83.0	87.0	8.9
Crop residue	0.1	0.2	0.2	0.1
Saw dust	0.1	0.2	0.1	0.1
Solar	0.1	0.1	0.1	0.1
Animal waste	0.0	0.1	0.0	0.1
Other	0.3	0.3	0.4	1.9
Not stated				

* Category not used in 1985, 2004

Sources: [1] Statistics Sierra Leone, 2015 Population and Housing Census. [2] Statistics Sierra Leone. (2006) Final Results. 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics

[3] Central Statistics Office, The Analytical Report. 1985 Population and Housing Census, Sierra Leone.

Table 11.9 Principal sources of fuel supply for cooking and lighting by region and place of residence (continued)

Lighting	Total country		
	1985	2004	2015
Lighting			
Total	100.0	100.0	100.0
Electricity	9.1	4.1	17.8
Gas	0.1	0.3	0.2
Kerosene	84.7	85.6	1.2
Generator	*	1.1	0.9
Battery/re-chargeable light	*	0.8	76.4
Candle	*	0.8	0.2
Wood	5.0	5.1	1.6
Solar	*	*	0.8
Other	0.1	2.2	0.8
Not stated	0.4	*	

Lighting	Place of residence 2015	
	Rural	Urban
Lighting		
Total	100.0	100.0
Electricity	0.7	38.9
Gas	0.2	0.3
Kerosene	1.4	0.9
Generator	0.4	1.6
Battery/re-chargeable light	93.0	56.1
Candle	0.1	0.3
Wood	2.6	0.3
Solar	0.7	1.0
Other	0.9	0.7
Not stated		

Lighting	Region 2015			
	Eastern	Northern	Southern	Western
Lighting				
Total	100.0	100.0	100.0	100.0
Electricity	5.9	6.6	6.3	51.7
Gas	0.1	0.3	0.1	0.3
Kerosene	0.4	1.9	1.0	1.1
Generator	0.6	0.5	0.7	1.7
Battery/ rechargeable light	89.6	85.7	89.0	43.2
Candle	0.2	0.1	0.1	0.3
Wood	1.1	3.1	1.4	0.2
Solar	1.0	0.9	0.5	0.7
Other	1.1	0.8	0.7	0.8
Not stated				

* Category not used in 1985, 2004

Sources: [1] Statistics Sierra Leone, 2015 Population and Housing Census. [2] Statistics Sierra Leone. (2006) Final Results. 2004 Population and Housing Census.

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[3] Central Statistics Office, The Analytical Report. 1985 Population and Housing Census, Sierra Leone.

11.8.3 Source of water

In the 2008 National Water and Sanitation Policy (Government of the Republic of Sierra Leone, 2010), the Government stated that access to safe and adequate water to meet basic human needs is a fundamental human right. It also acknowledged its obvious health and wellbeing implications. The policy was further recognized in the objectives of Sierra Leone's Development Vision 2025, Poverty Reduction Strategy Paper and the Millennium Development Goals.

Data on principal source of water supply for drinking and household use are presented in Table 11.10. In 1985, information was collected on source of water supply with no distinction made between drinking water and water for household use. For the 2004 Census, the question was on source of drinking water only. However, in 2015, there were two questions on sources of water for drinking and for household use. Consequently, the necessary caution should be exercised in the interpretation of the data. For the trend analysis we make the plausible assumption that the source of water stated in 1985 served the population's need for both drinking and household use. Aggregating all sources of water, there is an increase in the proportion of households obtaining drinking water from taps from 18 per cent in 1985 to 26.3 per cent and 36.2 per cent in 2004 and 2015 respectively. Similarly, combining all sources of water from wells showed a moderate increase from 35.5 per cent in 1985 to 39.2 per cent and 41.2 per cent in 2004 and 2015 respectively.

This represents an increase of nearly 6 per cent over the 30 year period. By 2015, the percentage of households whose main source of drinking water was from river, riverbed or stream declined by more than half its level in 1985 (43.2 per cent) to 19.2 per cent. The major sources of drinking water changed from river, riverbed or stream (43.2 per cent), well (35.5 per cent) and tap (18 per cent) in 1985 to well (39.2 per cent), river, riverbed or stream (34 per cent) and tap (26.2 per cent) in 2004 and then to well (41.2 per cent), tap (36.2 per cent), and river, riverbed or stream (19.2 per cent) in 2015.

Public tap provided the leading source of drinking water in all regions, with the exception of the Northern Region. Other important sources were protected ordinary well and river, riverbed or stream. In the Northern Region, river, riverbed or stream was the main source of drinking water, followed by protected ordinary well.

The rural-urban comparisons show that urban areas had higher percentages of households using water from safer sources than rural households. For example, for public tap (rural 25.3 per cent, urban 33.5 per cent) and protected ordinary well (rural 14 per cent, urban 30 per cent).

Table 11.10 Principal source of water supply for drinking and household use by region and place of residence

Source of water	Total country			Source of water	Place of residence 2015	
	1985	2004	2015		Rural	Urban
Drinking				Drinking		
Number of households	485,711	819,848	1,265,468	Number of households	697,734	567,734
Total	100.0	100.0	100.0	Total	100.0	100.0
Piped indoors	18.0*	1.6	0.9	Piped indoors	0.1	1.9
Piped in compound	***	4.9	4.3	Piped in compound	0.8	8.6
Public tap	***	15.5	28.9	Public tap	25.3	33.5
Protected ordinary well	35.5**	15.4	21.2	Protected ordinary well	14.0	30.0
Protected spring	***	*	3.6	Protected spring	3.4	3.9
Unprotected ordinary well	***	12.9	5.1	Unprotected ordinary well	7.1	2.6
Unprotected spring	***	*	3.5	Unprotected spring	5.7	0.9
Mechanical well	***	10.9	7.8	Mechanical well	10.2	5.0
River/riverbed/ stream	43.2	34.0	19.2	River/riverbed/ stream	32.7	2.7
Neighbour's tap	***	4.3	2.1	Neighbour's tap	0.4	4.2
Sachet/bottled water	***	***	2.7	Sachet/bottled water	0.1	5.8
Water vendor/ bowser	***	0.4	0.4	Water vendor/ bowser	0.2	0.8
Other	2.8	0.2	0.2	Other	0.1	0.2
Not stated	0.4	***	***	Not stated	***	***

18.0* Represents water from all taps.

35.5** Represents water from all types of wells

*** Category not used in 1985, 2004 and 2015

Sources: [1] Statistics Sierra Leone, 2015 Population and Housing Census. [2] Statistics Sierra Leone. (2006) Final Results. 2004 Population and Housing Census.

[3] Statistics Sierra Leone, 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics

[4] Central Statistics Office, The Analytical Report. 1985 Population and Housing Census, Sierra Leone.

Table 11.10 Principal source of water supply for drinking and household use by region and place of residence (continued)

Source of water	Region			
	Eastern	Northern	Southern	Western
Drinking				
Number of households	281,201	414,377	248,655	321,235
Total	100.0	100.0	100.0	100.0
Piped indoors	0.5	0.1	0.1	3.0
Piped in compound	3.1	0.8	0.7	12.7
Public tap	35.4	18.8	26.4	38.4
Protected ordinary well	19.6	24.0	20.3	19.6
Protected spring	2.7	3.3	2.6	5.7
Unprotected ordinary well	4.7	7.1	6.2	1.9
Unprotected spring	4.1	4.7	4.4	1.0
Mechanical well	9.8	9.5	10.7	1.7
River/riverbed/ stream	16.8	29.8	26.3	2.2
Neighbour's tap	2.7	0.6	1.1	4.3
Sachet/bottled water	0.4	0.7	0.8	8.6
Water vendor/ bowser	0.1	0.4	0.3	0.9
Other	0.1	0.2	0.1	0.2
Not stated	***	***	***	***

18.0* Represents water from all taps.

35.5** Represents water from all types of wells

*** Category not used in 1985, 2004 and 2015

Sources: [1] Statistics Sierra Leone, 2015 Population and Housing Census. [2] Statistics Sierra Leone. (2006) Final Results. 2004 Population and Housing Census.

[3] Statistics Sierra Leone, 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics

[4] Central Statistics Office, The Analytical Report. 1985 Population and Housing Census, Sierra Leone.

Table 11.10 Principal source of water supply for drinking and household use by region and place of residence (continued)

Source of water	Total country		
	1985	2004	2015
Household use			
Total			100.0
Piped indoors			0.9
Piped in compound			4.4
Public tap			23.8
Protected ordinary well			23.8
Protected spring			3.3
Unprotected ordinary well			6.5
Unprotected spring			4.1
Mechanical well			6.6
River/riverbed/ stream			24.6
Neighbour's tap			1.8
Sacket/bottled water			0.0
Water vendor/ bowser			0.3
Other			0.1

Source of water	Place of residence 2015	
	Rural	Urban
Household use		
Total	100.0	100.0
Piped indoors	0.1	1.9
Piped in compound	0.7	8.9
Public tap	20.4	27.8
Protected ordinary well	12.6	37.5
Protected spring	3.1	3.5
Unprotected ordinary well	7.6	5.1
Unprotected spring	6.3	1.3
Mechanical well	7.8	5.2
River/riverbed/ stream	40.8	4.7
Neighbour's tap	0.4	3.5
Sacket/bottled water	0.0	0.0
Water vendor/ bowser	0.1	0.4
Other	0.1	0.1

18.0* Represents water from all taps.

35.5** Represents water from all types of wells

*** Category not used in 1985, 2004 and 2015

Sources: [1] Statistics Sierra Leone, 2015 Population and Housing Census. [2] Statistics Sierra Leone. (2006) Final Results. 2004 Population and Housing Census.

[3] Statistics Sierra Leone, 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics

[4] Central Statistics Office, The Analytical Report. 1985 Population and Housing Census, Sierra Leone.

Table 11.10 Principal source of water supply for drinking and household use by region and place of residence (continued)

Source of water	Region			
	Eastern	Northern	Southern	Western
Household use				
Total	100.0	100.0	100.0	100.0
Piped indoors	0.4	0.1	0.1	3.0
Piped in compound	2.7	0.8	0.6	13.5
Public tap	27.3	15.3	20.0	34.4
Protected ordinary well	22.0	23.4	21.7	27.4
Protected spring	2.6	3.0	2.3	5.0
Unprotected ordinary well	5.8	8.2	7.5	4.1
Unprotected spring	4.7	5.0	4.9	1.5
Mechanical well	7.3	8.2	8.4	2.7
River/riverbed/ stream	25.0	35.3	33.4	3.6
Neighbour's tap	2.0	0.5	0.9	4.0
Sacket/bottled water	0.0	0.0	0.0	0.0
Water vendor/ bowser	0.1	0.2	0.2	0.5
Other	0.1	0.1	0.1	0.2

18.0* Represents water from all taps.

35.5** Represents water from all types of wells

*** Category not used in 1985, 2004 and 2015

Sources: [1] Statistics Sierra Leone, 2015 Population and Housing Census. [2] Statistics Sierra Leone. (2006) Final Results. 2004 Population and Housing Census.

[3] Statistics Sierra Leone, 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics

[4] Central Statistics Office, The Analytical Report. 1985 Population and Housing Census, Sierra Leone.

11.8.4 Sanitation

Sanitation covers refuse disposal, bathing and toilet facilities. Data were not collected on refuse disposal and bathing facilities in 1985.

11.8.4.1 Refuse disposal

Table 11.11 shows sanitation facilities by region and place of residence for 1985, 2004 and 2015. The two main methods of refuse disposal used in 2004 were deposited in bin and dumped anywhere. More than half of the households (54.1 per cent) used the former method, whilst about a third (30.8 percent) used the latter. Only a small fraction of households (3.5 percent) had their refuse collected.

The 2015 Census showed an improvement in the methods of refuse disposal in the country over the decade. The proportion using the leading method had not changed much (55.4 per cent) but the proportion of households that dumped their refuse anywhere had reduced by half (14.7 per cent). Households burning their refuse had increased two and half fold (14.7 per cent) and the proportion of households that had their refuse collected had more than doubled (8.8 per cent).

11.8.4.2 Bathing facilities

In 2004, most households (80 per cent) had their bathrooms outside the house. Households with a bathroom built outside the house constituted 42 per cent, while the percentage for those with a makeshift bathroom outside the house was 38 per cent. One in 10 had no bathrooms and 4 per cent of households had a bathroom inside their homes.

By 2015, the quality of bathroom facilities had shown moderate improvements. The proportion of households with a bathroom inside the house had nearly doubled (7.7 per cent), built bathrooms outside the house had also increased (56.1 per cent), while makeshift bathrooms outside the house had declined (31.8 per cent), and the percentage of households with no bathrooms at all had decreased to 2.3 per cent.

The bathroom facilities differ by region as shown in Table 11.11. The pattern in the Eastern and Northern regions was similar; each with more than half of households having built bathrooms outside, and about a third with makeshift bathrooms outside. The Southern Region had nearly equal proportions of households with built bathrooms outside (47.6 per cent) and makeshift (42.0 per cent) bathrooms outside. It also had the highest proportion (4.2 per cent) of households with no bathrooms. More households in the Western Region had better quality facilities. One in five households in the Western Region had a bathroom inside, and over 60 per cent had built bathrooms outside, less than 20 per cent (18.3 per cent) had makeshift bathrooms outside and less than 1 per cent (0.7 per cent) had no bathrooms at all.

Rural-urban differentials exit. Over 90 per cent of households in rural areas had bathrooms outside, with built bathroom outside (51.1 per cent) and makeshift bathrooms outside (40.1 per cent). Urban areas had about 10 per cent more (62.1 per cent) households with bathrooms built outside than rural households, and had a smaller proportion (21.7 per cent) with makeshift bathrooms outside. The proportion of households in the urban areas with bathrooms inside the house was eight times (14.9 per cent) that in the rural areas.

11.8.4.3 Toilet facilities

Seven classifications were used to distinguish types of toilet facilities in 2015, namely; ventilated improved pit (VIP), flushed toilet inside, flushed toilet outside, pit, bucket, bush or river bed and other. The same detailed classifications were used for toilet facilities in 2004, however, due to the unavailability of the raw data, it is not featured in Table 11.11.

In addition to the classifications above, toilet facilities were also categorized as private or communal based on whether the facility was for the exclusive use of one household or whether it was shared with other households. In 1985 there was no distinction between flushed facilities inside and outside, and also, no disaggregation by communal and privacy status.

The proportion of households using communal facilities declined by 10 per cent from 84 per cent in 2004 to 74 per cent in 2015, whilst the proportion of households using private facilities increased by the same margin from 16 per cent in 2004 to 26 per cent in 2015. Table 11.11 shows that for both communal and private toilet facilities, pit latrine was the most common facility used by households (over 70 per cent) in 2015. The second most common communal toilet facility used by households was bush or river bed (17.5 per cent), whilst flushed toilet inside was the second most common private toilet facility (11.2 per cent).

The proportions of households using communal facilities showed variation by region and place of residence. Even though a pit latrine was used by the majority of households in all regions, the Northern Region had the highest (82.3 per cent) and the Southern Region the lowest (52.1 per cent) proportion. A higher proportion of urban households (77.6 per cent) used communal pit latrine compared to 68.7 per cent for rural households. Bush or river bed was the second most common facility used by households in three regions; Southern (42.2 per cent), Eastern (17.7 per cent) and Northern (11.8 per cent). In the Western region, bush/river bed was used by 5.6 per cent of households and it was the fourth common toilet facility after flushed toilet inside (11.1 per cent) and flushed toilet outside (7.8 per cent). The proportion of urban households using bush/river bed (4.5 per cent) was six times the proportion for rural households. Among urban households flushed toilet inside (8.1 per cent) and outside (6.2 per cent) were respectively the second and third most common communal toilet facilities used.

The use of private toilet facilities also shows variation by region and place of residence. Over 80 per cent of households used pit in the three regions, with the Western Region (51.8 per cent) being the only exception. A third of households in the Western Region used flushed toilet inside, whilst 6.7 per cent used flushed toilet outside. Eighty eight per cent of rural households used pit, compared to 67 per cent of urban households. Flushed toilet inside was used by 20.5 per cent of urban households compared to 1.5 per cent of rural households.

Table 11.11 Sanitation facilities by region and place of residence

Refuse/bathing/toilet	Total country			Region			
	1985	2004	2015	Eastern	Northern	Southern	Western
Refuse							
No. of households	485,711	819,848	1,265,468	281,201	414,377	248,655	321,235
Total		100.0	100.0	100.0	100.0	100.0	100.0
Collected		3.5	8.8	3.0	5.0	5.6	21.0
Dumped anywhere		30.8	14.7	10.8	20.6	16.3	9.1
Burnt		5.9	14.7	7.3	15.1	8.5	25.3
Buried		3.3	4.6	2.9	6.6	3.9	4.1
Deposited in bin		54.1	55.4	74.4	51.3	64.4	37.1
Other		2.4	1.9	1.5	1.4	1.4	3.3
Bathing							
Total		100.0	100.0	100.0	100.0	100.0	100.0
Inside		4.1	7.7	3.5	3.6	3.5	19.9
Outside; built		41.7	56.1	55.3	58.1	47.6	60.5
Outside; makeshift		38.5	31.8	35.6	33.6	42.0	18.3
Other		5.2	2.1	2.8	2.6	2.7	0.6
None		10.6	2.3	2.8	2.1	4.2	0.7
Toilet							
Communal			932,457	212,433	301,079	181,527	237,418
Total	100.0		100.0	100.0	100.0	100.0	100.0
Communal-VIP	*		2.0	2.0	1.5	2.4	2.2
Communal-flushed inside	7.4**		3.7	1.1	1.2	1.1	11.1
Communal-flushed outside			3.0	1.2	1.9	0.7	7.8
Communal-pit	62.7***		72.5	76.7	82.3	52.1	71.7
Communal-bucket	6.5****		0.3	0.2	0.2	0.2	0.8
Communal-bush/river bed	22.7		17.5	17.7	11.8	42.2	5.6
Communal-other	0.2+		1.0	1.1	1.0	1.4	0.8
Not stated	0.4						
Private							
Total			100.0	100.0	100.0	100.0	100.0
Private-VIP			4.2	4.6	2.4	3.5	6.9
Private-flushed inside			11.2	3.3	3.6	5.7	32.3
Private-flushed outside			2.8	1.5	1.7	1.3	6.7
Private-pit			77.6	86.3	88.8	82.0	51.8
Private-bucket			0.4	0.4	0.3	0.5	0.5
Private-other			3.8	3.9	3.2	7.1	1.7

Table 11.11 Sanitation facilities by region and place of residence (continued)

Refuse/bathing/toilet	Place of residence 2015	
	Rural	Urban
Refuse		
No. of households	697,734	567,734
Total	100.0	100.0
Collected	2.7	16.2
Dumped anywhere	19.9	8.3
Burnt	8.3	22.4
Buried	4.4	4.9
Deposited in bin	63.3	45.7
Other	1.5	2.4
Bathing		
Total	100.0	100.0
Inside	1.8	14.9
Outside; built	51.1	62.1
Outside; makeshift	40.1	21.7
Other	3.4	0.6
None	3.6	0.7
Toilet		
Communal	534,245	398,212
Total	100.0	100.0
Communal-VIP	1.7	2.4
Communal-flushed inside	0.4	8.1
Communal-flushed outside	0.7	6.2
Communal-pit	68.7	77.6
Communal-bucket	0.2	0.6
Communal-bush/river bed	27.2	4.5
Communal-other	1.2	0.8
Not stated	0.4	
Private		
Total	100.0	100.0
Private-VIP	2.8	5.6
Private-flushed inside	1.5	20.5
Private-flushed outside	1.0	4.6
Private-pit	88.4	67.2
Private-bucket	0.4	0.4
Private-other	5.9	1.7

*Category not used

** Represents all types of flushed toilet

*** Represents all types of pits

**** Represents all types of bucket; + Represents all types of Other

Sources: [1] Statistics Sierra Leone, 2015 Population and Housing Census. [2] Statistics Sierra Leone. (2006) Final Results. 2004 Population and Housing Census. [3] Statistics Sierra Leone, 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics

[4]Central Statistics Office, The Analytical Report. 1985 Population and Housing Census, Sierra Leone.

11.9 Main source of information

The purpose of communication is to inform, educate, entertain and influence opinion. Perko (2012) has noted that efficient communication requires detailed understanding of the issues that influence people's attentiveness, recall of information and the process of opinion formation related to possible recommendations. Knowledge of the most effective medium (media) of communication in any country is necessary to facilitate government interaction with the population, as well as between businesses, civil society organizations and other interested groups.

Table 11.12 shows that there has been a drastic change in the main sources of information for the general public between 2004 and 2015. The main sources in 2015 were radio (71.1 per cent) and word of mouth (18.8 per cent), whilst in 2004 it was by word of mouth (49 per cent) and radio (47.7 per cent). Television increased its share by more than five times (0.9 in 2004 and 4.8 per cent in 2015) over the decade. Apart from the Western Region and urban areas, where television was second to radio, the pattern in the other three regions and rural areas was the same with variations only in the percentages, and less than 2 per cent of households obtained information from television.

The leading role of radio portrayed by the 2015 Census data is confirmed by the research of Musa (2017) and Mazzei and Scuppa (2006). Both studies identified radio as the most effective mass media channel to reach the general public.

Table 11.12 Main source of information for household by region and place of residence

Main source of information	Total country		Region 2015				Place of residence	
	2004	2015	Eastern	Northern	Southern	Western	Rural	Urban
Number of households	819,848	1,265,468	281,201	414,377	248,655	321,235	697,734	567,734
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Radio	47.7	71.1	75.8	66.0	72.0	73.0	65.5	78.1
Television	0.9	4.8	1.2	1.9	1.3	14.5	1.0	9.5
Print media	0.3	0.3	0.2	0.2	0.2	0.5	0.2	0.4
Post mail	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1
Hand mail	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Social media	*	0.6	0.3	0.3	0.5	1.5	0.2	1.1
Word of mouth	49.0	18.8	18.0	26.2	21.1	8.1	27.3	8.4
Church/mosque	0.9	1.9	1.9	3.1	1.8	0.6	2.8	0.9
Other	0.5	2.1	2.3	2.1	2.6	1.4	2.6	1.4

* Category not used in 2004

Sources: [1] Statistics Sierra Leone, 2015 Population and Housing Census. [2] Statistics Sierra Leone. (2006) Final Results. 2004 Population and Housing Census.

[3] Statistics Sierra Leone, 2004 Population and Housing Census. Analytical Report on Housing Situation and Characteristics.

11.10 Distance to nearest facilities

Physical access to health, education and water facilities is measured by distance (or travel time). Data on distance to the nearest health facility, primary school and source of water by region and place of residence are shown in Table 11.13.

11.10.1 Distance to nearest health facility

Health service utilization is determined by physical and financial access. Where service is free, utilization is influenced by physical access and quality of service. Many writers have observed that physical distance to health facilities in Sierra Leone is a major hindrance to accessing health care (Mason 2017; SLRC 2014; AHO 2014).

In the inter-censal period, there was a 10 per cent increase in the proportions of households living within less than half a mile (34.1 per cent in 2004, 43.7 per cent in 2015) and a 3 per cent increase for households between half a mile and a mile (13 per cent in 2004 and 16.1 per cent in 2015) of a health facility. Declines of 4 per cent and about 10 per cent occurred for households between one and five miles, and those more than five miles from a facility respectively. Only the Western Region (57.9 per cent) and urban areas (59.4 per cent) had more than half of their households living within less than half a mile of a health facility. The rural areas recorded the lowest proportion (30.9 per cent) of households living within less than half a mile.

To overcome the challenges of geographical access, the Government has instituted a training programme for community health workers to assist in monitoring illness at the community level and refer those requiring treatment to the primary health units (SLRC 2017).

11.10.2 Distance to nearest primary school

Studies by UNESCO (2013) and SSL (2014) showed that the further the distance to the nearest primary school, the higher the proportion of children not attending school. The distance to school also influences retention and completion rates in primary school, especially among rural children.

From 2004 to 2015, the proportion of households with a primary school within their compound declined from 8.1 per cent to 4.7 per cent. The Northern Region had the highest percentage of households (5.5 per cent) with a school within their compound, whilst the Southern Region had the lowest percentage (4.1 per cent). A higher percentage of rural households (4.9 per cent) had primary schools within their compound, compared to urban households (4.4 per cent). There was an increase in the proportion of households with a primary school less than half a mile away from 55.9 per cent in 2004 to 64.1 per cent in 2015. The Northern Region had the lowest proportion (59.7 per cent) and the Western Region had the highest proportion (71.6 per cent) of households with a primary school less than half a mile away. Households with a primary school less than half a mile away showed differentials by place of residence, with more urban households (73.1 per cent) than rural households (56.7 percent).

Between 14 and 15 per cent of households had a primary school located between a half and one mile away. In the Western Region, 4.5 per cent of households had a school within one to five miles compared to 11 per cent for the Eastern and Northern regions and 13 per cent for the Southern Region. Whilst only 1.4 per cent of households in the Western Region had primary schools five or more miles away, the percentages for the other three regions were more than four times that of the Western Region.

Urban areas were better served than rural areas; 73 per cent of urban households had a primary school less than half a mile away, compared to 57 per cent for rural households, 4 per cent of urban households had primary schools between one and less than five miles away compared to 14.5 per cent for rural households. Similarly, 0.9 per cent of urban households had a primary school five or more miles away compared to 8.6 per cent for rural households.

11.10.3 Distance to nearest source of water

The distance to the nearest source of water has implications for personal and food hygiene, laundry and bathing and the level of health concern. A study by Howard and Bartrum (2003) found that the closer the water service is to the household, the better its basic needs will be met and health concern will be low. This has been confirmed from studies by the Environmental Health Group of the London School of Hygiene and Tropical Medicine, using data from 39 countries. It contends that to promote health "… make more water use more convenient and easy to access". Data on distance to the nearest water source provides the information needed for an assessment of water supply and access.

Water was, generally, closer to households than primary schools or health facilities. More than 10 per cent of households had water within their compound and over 60 per cent had water less than half a mile away. In both 2004 and 2015, 16 per cent of households had water within their compound.

The Western Region had the highest proportion (19.7 per cent) of households with water in their compound, while the percentage for the other three regions was 15 per cent. The percentage of households in urban areas with water in their compound (22.5 per cent) was double that for rural households (11 per cent). There had been a slight increase in the proportion of households with water within less than half a mile from 66.9 per cent in 2004 to 67.5 per cent in 2015. Eastern and Southern regions had the highest percentage (71.1) for this category, while the Western Region had the lowest percentage of 62.6.

The rural areas had 71.3 per cent of households with water less than half a mile away, compared to 62.7 per cent for urban households. Over the decade there has been a decline in the percentage of households with water between half a mile and less than a mile away (1.6 per cent) as well as between one and less than 5 miles away (0.7 per cent). The Northern Region had the highest percentage (11.8 per cent) of households with water between half a mile and a mile way, while the Southern Region had the lowest (8.5 per cent).

The rural areas also had a higher proportion of households (10.9 per cent) in this category than urban areas (9.2 per cent). The Northern Region also had the highest percentage of households (4 per cent) with water between one and five miles, while the Eastern Region had the lowest percentage of households (2.8 per cent). The rural areas also had a higher percentage (3.9 per cent) of households with water between one and five miles away, compared to 2.5 per cent in urban areas. For water sources at five or more miles away, there has been a slight increase from 1.1 per cent in 2004 to 1.2 per cent in 2015. The highest proportion for water source five or more miles away was recorded by the Northern Region (1.4 per cent), while the lowest proportion was observed in the Southern Region (1 per cent). The proportion of households in urban areas with water more than 5 miles away (0.8 per cent) was half of that for rural areas (1.6 per cent).

Table 11.13 Distance from household to nearest health facility, primary school and source of water by region and place of residence

Health facility/ primary school/water source	Total country		Region				Place of residence 2015	
	2004	2015	Eastern	Northern	Southern	Western	Rural	Urban
Health facility								
Number of households	819,848	1,265,468	281,201	414,377	248,655	321,235	697,734	567,734
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Within compound	3.1	2.3	2.3	2.2	2.2	2.5	2.0	2.7
Less than ½ mile	34.1	43.7	42.8	35.8	39.3	57.9	30.9	59.4
½ mile < 1 mile	13.0	16.1	14.8	16.2	12.9	19.7	12.7	20.4
1 mile < 5 miles	24.3	20.0	21.2	22.1	25.3	12.1	26.5	12.0
5 miles and above	25.6	15.3	17.1	20.9	18.8	3.7	25.7	2.5
Don't know	*	2.6	1.8	2.8	1.5	4.1	2.3	3.1
Primary school								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Within compound	8.1	4.7	4.4	5.5	4.1	4.3	4.9	4.4
Less than ½ mile	55.9	64.1	63.5	59.7	62.3	71.6	56.7	73.1
½ mile < 1 mile	13.6	14.0	13.6	14.9	12.5	14.3	13.6	14.5
1 mile < 5 miles	14.3	9.9	11.1	11.3	13.1	4.5	14.5	4.1
5 miles and above	8.0	5.1	5.9	6.5	6.7	1.4	8.6	0.9
Don't know	*	2.3	1.5	2.1	1.3	3.9	1.7	3.0
Source of water								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Within compound	16.1	16.2	14.6	14.9	15.5	19.7	11.0	22.5
Less than ½ mile	66.9	67.5	71.1	66.6	71.1	62.6	71.3	62.7
½ mile < 1 mile	11.8	10.2	9.2	11.8	8.5	10.2	10.9	9.2
1 mile < 5 miles	4.0	3.3	2.8	4.0	2.9	3.0	3.9	2.5
5 miles and above	1.1	1.2	1.2	1.4	1.0	1.3	1.6	0.8

* Category not used in 2004

Sources: [1] Statistics Sierra Leone, 2015 Population and Housing Census. [2] Statistics Sierra Leone. (2006) Final Results. 2004 Population and Housing Census.

11.11 Summary, conclusions and recommendations

11.11.1 Summary

Mindful of its responsibilities of providing adequate housing for its people, the Government of Sierra Leone has drawn up numerous plans, policies and programmes on the issue since independence.

There has been a decline in average household size from 6.6 in 1985 to 5.6 in 2015 but the number of households has increased two and a half times from 485,711 in 1985 to 1,265,468. Seven out of 10 of households were owner occupiers while two in 10 were renting. The situation was different in the Western Region where more than half (54.1 per cent) and in urban areas where just below half (47 per cent) were renting. Even though the condition of dwelling units showed improvements from 2004 to 2015, nearly 30 per cent of dwelling units needed rehabilitation. The number of persons per room suggests overcrowding in the country, the situation being more acute in Eastern, Southern and Western regions where the persons per room is 2.3, 2.2 and 2.2 respectively. About 68 per cent of households own at least one impregnated mosquito net. There were wide variations by region and place of residence with rural households being better off at 80 per cent ownership.

The main types of roofing materials used by households were zinc (82 per cent) and thatch (13 per cent). There have been improvements from 2004 to 2015, as the proportion of households using zinc had increased by 16.9 per cent while the proportion using thatch had declined by 13.1 per cent. There are marked differences by region and place of residence.
Mud bricks (43 per cent), cement blocks (25 per cent), mud and wattle (15 per cent) were used for walls. This however conceals the fact that, except for the Western Region, over 60 per cent of households used mud bricks or mud and wattle for walls and 60 per cent had mud floors. Mud floors are an issue because they permit the entry of rodents which pass diseases to household members.

Even though there appears to be a shift from wood to charcoal as the main fuel for cooking, wood was still the dominant fuel for cooking for over 80 per cent of households in the Eastern, Northern and Southern regions. In the Western Region, however, the percentage was just 8.9. Battery/rechargeable light was the main source of fuel for lighting in the Eastern, Northern and Southern regions, serving the needs of 76 to 89 per cent of households while the proportion for rural areas was 93 per cent. The situation was different for the Western Region where more than half of households used electricity and 43 per cent used battery or rechargeable light. Among urban dwellers electricity accounted for 39 per cent and battery/ rechargeable light was 56 per cent.

There has been a 10 per cent increase in the proportion of households with private toilet facilities and the proportion of households using flushed toilet doubled between 2004 and 2015 (3.5 per cent and 8.5 per cent respectively). The main source of information for all households was radio for all the regions and both rural and urban households. Primary schools were closer to households than health facilites with the majority (68.8 per cent) within less than half mile. Eight out of 10 households had water within less than half a mile away.

11.11.2 Conclusion

In spite of the Government's policies and programmes, it has not yet succeeded in providing adequate housing and related facilities for its people. These housing needs have been aggravated by the civil war which lasted from 1991 to 2002 (Sesay, 2001).

Even though there have been some improvements in housing conditions and facilities, the quality and provision is far from optimal. In some parts of the country, the quality of housing may still be described as poor as evidenced by the presence of rodents and other pests putting household members at risk of diseases such as Lassa fever.

From the many plans, programmes and Minister Sesay's statement to the United Nations General Assembly, the Government knows exactly what needs to be done, but the limitation is funding. In that statement he observed: "As and when the economy improves, new programmes will be developed and implemented". However, the people of this country cannot wait for the economy to improve. New ways of funding must be sought. A massive reconstruction effort is required to ensure rapid improvements in housing conditions for the entire population.

11.11.3 Recommendations

The reconstruction programme will need massive funding. Government might consider trading some of the country's untapped mineral wealth to support the reconstruction and rehabilitation programme. Government would want to ensure value for money in the implementation and execution of this national agenda.

Interested groups such as government, donor agencies and non-governmental organizations should stop paying lip service to the use of local building materials and ensure their use. In identifying solutions for the prevention of Lassa fever, Kelly et al (2013) made proposals for a pilot housing programme. The Government might consider implementing that programme as a first step in its housing development agenda. Because of its comprehensive nature, the relevant part of their recommendation is quoted here:

"…the Government of Sierra Leone might first work in partnership with international and non-governmental organizations with expertise in housing design, such as UN-HABITAT, Habitat for Humanity, and Architects Without Borders, to develop an architectural plan for low-cost houses… using locally available materials. The design might involve … modifications to existing structures … such as reinforcing floors and walls… . The Government would then provide raw materials and logistic support to community members … Ideally the materials would be free, but other options would be to make them available at a subsidized cost or under favourable loan conditions … Utilization of local resources and labour for production of building materials would … ensure sustainability …"

Government institutions should be strengthened to keep records of building projects, to facilitate data collection on housing and related services.

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CHAPTER 12: POPULATION IN AGRICULTURE

12.1 Introduction

Sierra Leone, like most developing countries, is an agrarian economy. The agriculture sector accounts for almost half of the Gross Domestic Product (GDP) and it employs the majority of the economically active labour force.

Agricultural production, manufacturing, mining and activities in the service sector are the major economic activities pursued by the people of Sierra Leone. Of these, the majority of the labour force are in agriculture. The agricultural sector is, however, further divided into the crop, livestock, fishery and forestry sub-sectors.

The country is endowed with good natural resources, climatic and agro-ecological conditions that support all year round agricultural production. This is in addition to a favourable macro-economic environment, high potential commitment to agricultural development, comparative advantage and increased empowerment of farmers and stakeholders (Lahai et al, 2006).

This chapter looks at the characteristics of the agricultural household heads by age, sex, educational status and literacy rate. It also discusses the region of residence of the agricultural population and their place of residence. Household headship by sex and age, household size and composition, among other characteristics, are also discussed. The area cultivated for the production of different types of crops, sale of agricultural produce and access of the agricultural population to agricultural equipment and infrastructure are also included in the chapter.

12.2 Definition of concepts

The census collected information on the population of Sierra Leone and its characteristics, including the population engaged in agricultural production. Questions on the agricultural population were included in Module 5 of the questionnaire. Information was collected on the three types of agricultural activities in which the agricultural population are engaged: crop production, fishery and animal husbandry.

Agricultural households are those with members who engage in agricultural activities, whether small scale or large scale. Fishery activities include those in a pond, artisanal fishing and coastal fishing.

12.3 Agricultural households

12.3.1 Households by region and place of residence

The results of the 2015 Census show there were 732,461 agricultural households in Sierra Leone, with 82 per cent and 18 per cent respectively in rural and urban areas (Table 12.1). The distribution of the agricultural households further shows that the Northern Region had the highest percentage (42.3) of the agricultural households in the country, followed by the Eastern (27.8) and the Southern (24.9) regions. These three regions had 95 per cent of all the agricultural households in the country. The Western Region was the most urbanized and, therefore, had a predominantly non-agricultural economy. It recorded only 5 per cent of the agricultural households that were enumerated at the census.

As can be seen from Table 12.1, the distribution of agricultural households by place of residence shows that the highest percentages of agricultural households in rural areas were again recorded in the Northern, Southern and Eastern regions with the Western Region having a negligible percentage. The percentage distribution of the agricultural households in urban areas ranges from approximately 12 per cent in the Southern Region to 34.2 per cent in the Northern Region. The Western Region, despite the small percentage of agricultural households recorded in it at the census, had almost a quarter (approximately 24 per cent) of all the urban agricultural households recorded in the entire country.

Table 12.1 Distribution of agricultural households by region and place of residence

Region	Total	Percentage	Rural	Percentage	Urban	Percentage
Total	732,461	100.0	600,136	100.0	132,325	100.0
Eastern	203,286	27.8	162,991	27.2	40,295	30.5
Northern	310,073	42.3	264,771	44.1	45,302	34.2
Southern	182,402	24.9	167,214	27.9	15,188	11.5
Western	36,700	5.0	5,160	0.9	31,540	23.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.3.1 Households by size and place of residence

The 2015 Census recorded the size of agricultural households in Sierra Leone to be generally large in both rural and urban areas (Table 12.2). More than four-fifths (83 per cent and 82 per cent respectively in rural and urban places of residence) of the agricultural households have four or more members. Small household sizes with less than three members constituted 7 and 9 per cent respectively in rural and urban areas.

Depending on the age composition of the agricultural households, the large number of members can contribute to the labour required for agricultural activities. Family labour contribution to agricultural activities is usually required for labour intensive agricultural production and when the scale of production large. However, beyond the subsistence level, particularly when households engage in commercial agricultural activities, household labour may not be sufficient.

Table 12.2 Agricultural households by size and place of residence

Household size	Total	Percentage	Rural	Percentage	Urban	Percentage
1	17,470	2.4	13,260	2.2	4,210	3.2
2	37,481	5.1	30,316	5.1	7,165	5.4
3	71,472	9.8	58,852	9.8	12,620	9.5
4	95,968	13.1	79,354	13.2	16,614	12.6
5	108,934	14.9	90,307	15.0	18,627	14.1
6	98,615	13.5	81,674	13.6	16,941	12.8
7	82,443	11.3	68,035	11.3	14,408	10.9
8	68,350	9.3	56,505	9.4	11,845	9.0
9	47,824	6.5	39,387	6.6	8,437	6.4
10+	103,904	14.2	82,446	13.7	21,458	16.2
Total	732,461	100.0	600,136	100.0	132,325	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.3.2 Age and sex composition of the household heads

The age distribution of the population into agricultural and non-agricultural households shows them to be predominately young (Table 12.3). Approximately 44 per cent and 36 per cent respectively are less than 15 years. The proportion of the population that are teenagers and young adults (15- 29 years) was also high, 27.7 per cent in agricultural households and 34.8 in non-agricultural households. A little more than 7 out of every 10 household members in both types of households are children, teenagers and young adults. The aged, 60 years and over, constituted a slightly higher percentage of agricultural households (5.5 per cent) than the non-agricultural households (4.4 per cent).

Agricultural production is barely mechanized in Sierra Leone, so this youthful age structure probably supports a model of necessary family labour in agricultural households. However, it risks children and young people being prevented from participating in formal education.

Table 12.3 Age distribution of household population by agricultural activity status

Age-group	households	Percentage	Agriculture household	Percentage distribution	Non-agricultural household	Percentage distribution
0 – 4	937,973	13.3	642,095	14.1	295,878	11.7
5-9	1,108,130	15.7	780,119	17.2	328,011	12.9
10-14	846,137	12.0	553,954	12.2	292,183	11.5
15 – 19	871,348	12.3	545,010	12.0	326,338	12.9
20 – 24	660,438	9.3	365,652	8.1	294,786	11.6
25 – 29	605,621	8.6	344,832	7.6	260,789	10.3
30 – 34	432,373	6.1	258,443	5.7	173,930	6.9
35 – 39	419,485	5.9	260,709	5.7	158,776	6.3
40 – 44	297,997	4.2	190,749	4.2	107,248	4.2
45 – 49	241,362	3.41	157,526	3.5	83,836	3.3
50 – 54	186,285	2.6	122,113	2.7	64,172	2.5
55 – 59	110,200	1.6	71,290	1.6	38,910	1.5
60-64	112,486	1.6	77,878	1.7	34,608	1.4
65+	246,284	3.5	171,243	3.8	75,041	3.0
Total	7,076,119	100.0	4,541,613	100.0	2,534,506	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The distribution of agricultural households heads by sex of head and region (Table 12.4) shows that the highest proportion of the country's female agricultural household heads were in the Northern and Southern regions.

Table 12.4 Agriculture households by sex of head and region

Region	Total	Percentage	Male	Percentage	Female	Percentage
Eastern	203,286	27.8	154,172	28.9	49,114	24.7
Northern	310,073	42.3	220,133	41.2	89,940	45.2
Southern	182,402	24.9	132,332	24.8	50,070	25.2
Western	36,700	5.0	27,051	5.1	9,649	4.9
Total	732,461	100.0	533,688	100.0	198,773	100.0

12.3.3 Age-sex distribution of heads of agricultural households

The heads of agricultural households are mostly male (Table 12.5). With the exception of three age groups (15- 19 years, 20- 24 years and 60+ years), males form more than 70 per cent of the heads of the various age groups. This high proportion reflects the leadership position of males in agricultural households more generally.

Table 12.5 Age and sex of heads of agricultural households

Age-group	Total	Male	Female
15 - 19	100.0	56.2	43.8
20 - 24	100.0	67.9	32.1
25 - 29	100.0	75.6	24.4
30 - 34	100.0	74.8	25.2
35 - 39	100.0	75.9	24.1
40 - 44	100.0	74.6	25.4
45 - 49	100.0	76.4	23.6
50 - 54	100.0	71.9	28.1
55 - 59	100.0	71.4	28.6
60+	100.0	67.5	32.5
Total	100.0	72.9	27.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The heads of the agricultural households in Sierra Leone reside mostly in rural areas, as expected. Overall, 82 per cent of agricultural households are recorded in rural areas in the country (Table 12.6). The percentages do not vary much among the age groups.

Nevertheless, open spaces, backyards or unbuilt areas in urban areas do offer opportunities for urban residents to engage in agricultural activities (Yankson, 2004). Market gardening, in particular, is common in African cities. With declining employment opportunities in African urban areas, farming and other informal sector economic activities are now becoming attractive to urban residents.

Residents in Greater Freetown now engage in backyard and/or street gardening and reported as agricultural households in the 2004 Census(Lahal et al., 2006). The 2004 results also indicated that production of vegetables, particularly exotic ones, is an emerging economic activity in urban areas; and that farming households, especially in urban areas, depend on it for their livelihood.

Table 12.6 Heads of agricultural households by age and place of residence

Age group	Number	Percent	Rural Percent	Urban Percent
15 - 19	5,617	100.0	79.2	20.8
20 - 24	24,613	100.0	81.1	18.9
25 - 29	62,964	100.0	82.2	17.8
30 - 34	76,091	100.0	82.6	17.4
35 - 39	109,388	100.0	82.1	17.9
40 - 44	94,635	100.0	81.7	18.3
45 - 49	93,415	100.0	81.7	18.3
50 - 54	74,042	100.0	81.1	18.9
55 - 59	45,770	100.0	80.0	20.0
60-64	46,580	100.0	81.8	18.2
65+	99,346	100.0	83.5	16.5
Total	732,461	100.0	81.9	18.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

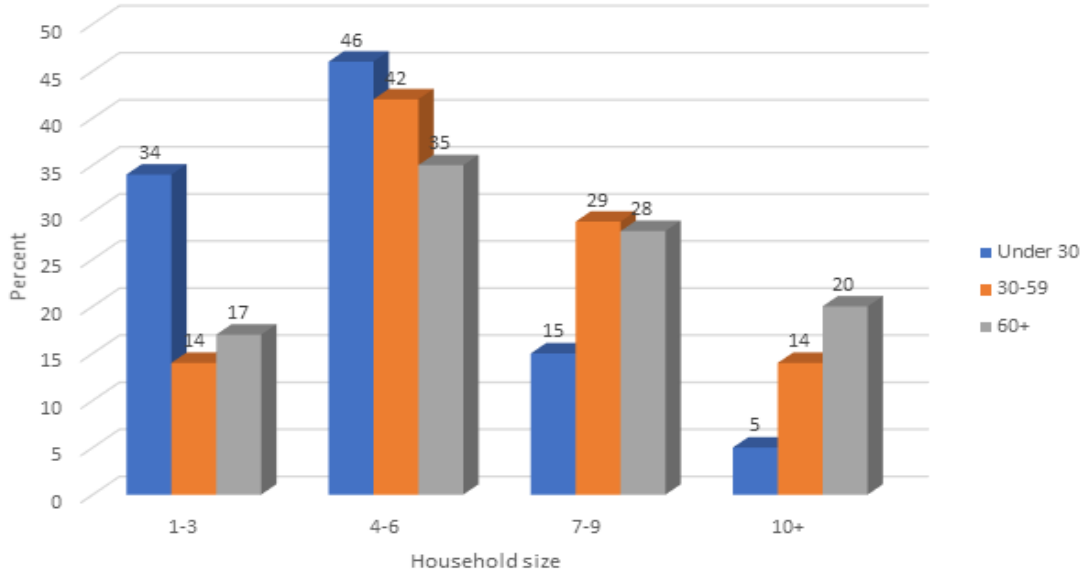
Households with four to six members were the most common size of household per household head (Figure 12.1) with an average of 41 per cent. The seven to nine member household size is the second commonest type of household size, with an average of 27 per cent.

Vast differences exist among the age categories with respect to the other household sizes. Households with one to three members ranged from 14 per cent among those aged 30-59 years to 34 per cent among those under 30 years.

As might be expected, household heads aged 60 years and over had the highest proportion of households of ten or more members (20 per cent) while heads aged below 30 years reported the lowest of 5 per cent.

The distribution of households by size and sex among the household heads shows that overall, the households headed by males had higher percentages with large household sizes compared with those of the females. The male-headed households had more members who could contribute to agricultural activities compared with those with female heads.

Figure 12.1 Heads of agricultural households by age and size of household



Source: Statistics Sierra Leone, 2015 Population and Housing Census

The vast majority (not less than 80 per cent) of the agricultural household heads in all the regions are married (currently, engaged, married in monogamous or polygamous union or have been cohabiting less than 5 years or 5 years and over) (Table 12.7). The highest proportion never married ranges from 2.5 per cent in the Northern Region to 16.9 per cent in the Western Region. The Western Region recorded the lowest proportion for household heads who are currently not married (2.6 per cent) while the rest of the regions have more than a tenth in this category.

These high proportions of married household heads again points to the low mechanization of agricultural production. Married heads are more likely to have families who can work on the land.

Table 12.7 Agricultural households by marital status of head and region

Region	Total	Never married	*Currently married	**Currently not married	Don't know
North	100.0	2.5	86.9	13.2	0.0
South	100.0	3.2	84.9	11.9	0.0
East	100.0	2.6	84.2	13.2	0.0
West	100.0	16.9	80.3	2.6	0.0
Total	100.0	6.3	84.1	10.2	0.0

*Currently married - engaged, married monogamous, married polygamous, cohabitation (< 5 years), cohabitation (= > 5 years)
**Currently not married - separated, divorced, widowed

Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.3.4 Education and literacy among agricultural households

The majority of agricultural household members had no education. On the average more than half (52.8 per cent) had no education (Table 12.8), with 24.8 per cent having a primary education. Nearly 80 per cent of spouses and nearly 71 per cent of heads of households had no education.

Vast differences are observed among the various categories of the household members. More than a third of the children (35.1 per cent) and other members (33.9 per cent) compared with less than a tenth of heads (8.2 per cent) and spouses (8.7 per cent) have primary education. Children have the highest percentage of secondary education (11.7 per cent).

The educational status of agricultural household members has improved, considering the higher proportion of children with primary and secondary school levels of education compared with those of the heads and spouses or the older generation.

Table 12.8 Educational level of agricultural household members 3 years and older

Level of education	All household members	Head	Spouse(s)	Children	Others
Kindergarten	3.9	1.1	0.9	5.9	6.1
Primary	24.8	8.2	8.7	35.1	33.9
JSS	10.1	7.4	6.5	11.7	8.8
SSS	5.8	6.4	2.5	6.0	4.5
Vocational/Tech/Nursing/ Teacher	1.0	2.4	0.7	0.6	0.6
Higher (First degree)	0.3	0.7	0.2	0.2	0.2
Tertiary (Post-graduate)	0.1	0.3	0.1	0.0	0.1
Koranic	1.0	2.5	0.3	0.6	0.7
Other	0.0	0.1	0.1	0.0	0.0
Don't know	0.0	0.0	0.0	0.0	0.0
Never attended school	52.8	70.6	79.9	39.7	44.8
Total	100.0	100.0	100.0	100.0	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Literacy rates are also low among agricultural household members. On average, almost six out of every ten agricultural household members were not literate (Table 12.9). The percentage ranges from 43 per cent among the children to 83 per cent among the spouses. A little more than half of the children were literate in English language only. The heads and spouses recorded rates that were less than average while other household members had more than the average rate. Generally the same pattern observed for educational attainment among the household members holds true for literacy.

Table 12.9 Language of literacy of agricultural household members 11 years and older

Language	All household members	Head	Spouse(s)	Children	Others
Local language only	2.4	2.6	2.7	2.2	2.6
English only	33.8	19.4	12.4	51.1	43.3
Local language and English	0.7	0.5	0.3	0.9	0.9
French	0.2	0.2	0.2	0.2	0.2
Local language and French only	0.0	0.0	0.0	0.0	0.0
English and French only	0.1	0.1	0.0	0.2	0.2
Local language, English and French	0.0	0.0	0.0	0.0	0.0
Arabic only	3.1	7.0	1.1	1.9	2.4
Local language and Arabic only	0.0	0.0	0.0	0.0	0.0
English and Arabic only	0.1	0.1	0.0	0.1	0.1
Local language, English and Arabic only	0.0	0.0	0.0	0.0	0.0
French and Arabic only	0.0	0.0	0.0	0.0	0.0
Local language, French and Arabic only	0.0	0.0	0.0	0.0	0.0
Local language, English, French and Arabic only	0.0	0.0	0.0	0.0	0.0
Other	0.3	0.3	0.2	0.3	0.3
None (not literate)	58.8	69.3	82.5	42.6	49.5
Don't know	0.4	0.4	0.5	0.4	0.5
Total	100.0	100.0	100.0	100.0	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The results of the 2015 Census show that on average almost seven out of every 10 of agricultural household heads were not literate in any language - English, Arabic or local languages (Table 12.10). A far higher proportion of the females (85.2 per cent) compared with the males (63.4 per cent) were illiterate. On average, only about a fifth of them were literate in English. Another seven per cent on average and approximately a tenth (9.3 per cent) of the males and one out of every 100 (0.8 per cent) of the females were literate in Arabic only.

In total, the heads of agricultural households had very low literacy rates. The males had higher literacy rates in both English only and Arabic only than the female agricultural household heads. Gender issues in education, enrolment, completion, among others may explain the gender gaps in the literacy rates between the sexes.In Africa, the agricultural sector labour force generally has the lowest levels of educational status, lowest literacy rates and lowest levels of income subgroups, even though farmers engaged in cash cropping and other commercial agricultural activities are usually not poor.

Table 12.10 Language of literacy of heads of agricultural households by sex

Literacy levels	Total	Percentage	Number of males	Percentage	Number of females	Percentage
Local language only	19,202	2.6	13,966	2.6	5,236	2.6
English only	142,215	19.4	121,937	22.8	20,278	10.2
Local language and English only	3,773	0.5	3,284	0.6	489	0.2
French only	1,372	0.2	1,124	0.2	248	0.1
Local language and French only	171	0.0	159	0.0	12	0.0
English and French only	819	0.1	697	0.1	122	0.1
Local language English and French only	152	0.0	141	0.0	11	0.0
Arabic only	51,134	7.0	49,523	9.3	1,611	0.8
Local language and Arabic only	276	0.0	254	0.0	22	0.0
English and Arabic only	993	0.1	921	0.2	72	0.0
Local language English and Arabic only	98	0.0	91	0.0	7	0.0
Other languages	1,916	0.3	1,487	0.3	429	0.2
Not literate	507,509	69.3	338,173	63.4	169,336	85.2
Do not know	2,831	0.4	1,931	0.4	900	0.5
Total	732,461	100.0	533,688	100.0	198,773	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.3.5 Employment status of head of agricultural households

The heads of the agricultural households were predominantly self-employed without employees (Table 12.11). The proportion ranges from a little more than half (54 per cent) in the Western Region to 81 per cent in the Eastern region. Some of these heads probably had household members working for them but were not enumerated as having employees because they were unpaid family workers. Consequently, the self-employed with employees (employer) and paid employees constituted small proportion of the heads in the various regions. The heads in the Western Region had the highest percentage who are paid employees (18.8 per cent) while the Northern Region recorded the lowest (4.4 per cent).

Table 12.11 Agriculture households by employment status of head and region

Employment status	Region			
	Northern	Southern	Eastern	Western
Paid employee	4.4	6.0	4.4	18.8
Self-employed without employees	78.5	74.3	80.9	53.6
Self-employed with employees (employer)	4.1	3.9	3.0	5.0
Unpaid family worker	3.4	4.4	3.8	0.8
Paid apprentice	0.1	0.2	0.2	0.7
Unpaid apprentice	0.4	0.8	0.6	0.4
Worked before but currently looking for work	0.3	0.3	0.2	1.9
Looking for work for the first time	0.8	0.7	0.5	3.3
Household work	2.9	3.6	2.2	3.9
Not working and not looking for work	2.9	2.8	1.8	4.6
Full time student	1.1	1.1	1.2	1.9
Retired/pensioner	0.5	0.7	0.4	2.6
Other, specify	0.6	0.9	0.6	2.0
Don't know	0.1	0.2	0.2	0.4
Total	100.0	100.0	100.0	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.3.6 Disability among agricultural population

Several disability types were reported by the agricultural households at the census, ranging from physical to mental and psychiatric disorders (Table 12.12).The rates of disability were high. Sons and daughters made up the highest proportion of the household to have no disability.

Among the household heads, the most common types of disability reported was sight impairment (47 per cent) and spinal injury (48.9 per cent). Poor sight is associated with old age, while spinal injury may be caused by the manual agricultural activities performed. A high percentage reported physical injury from polio and amputation. Many lost limbs during during the Civil War and amputees are not uncommon among those who survived the conflict. Their disability often makes agricultural work difficult and policy interventions are needed to address their needs.

Even though the sons and daughters of the heads of households recorded the highest percentage with no disabilities, their proportions with speech impairment (41.7 per cent), mental psychiatric disability (37.4 per cent) and physical disability (28.9 per cent) were relatively very high.

Table 12.12 Disability in agricultural households

Household Composition	Type of Disability	Physical (polio & amputee	Blind & partially sighted	Deaf & partially deaf	Speech difficulties & mute/dumb	Mental & psychiatric	Spinal injury	All other disabilities
Head	15.9	31.2	47.0	29.4	16.3	11.4	48.9	35.7
Spouse	12.0	10.8	10.5	13.3	7.5	7.6	13.0	13.5
Son/daughter	44.6	28.9	9.9	25.6	41.7	37.4	16.5	23.8
Sister/brother	5.9	7.0	5.6	6.2	7.5	13.5	4.3	5.9
Nephew/niece	4.2	3.3	1.5	3.3	4.3	5.6	1.3	2.5
Parent	1.0	3.2	10.6	5.6	2.1	2.8	5.0	5.0
Uncle/aunt	1.0	1.5	2.1	1.6	1.4	2.4	1.3	1.0
In-law	1.6	2.3	3.8	2.9	2.5	3.0	1.4	2.1
Grand parent	0.2	0.7	2.6	1.3	0.4	0.6	1.5	0.9
Grand child	0.8	0.4	0.1	0.3	0.8	0.4	0.2	0.5
Step son/ daughter	1.7	1.3	0.5	1.7	1.9	2.4	0.6	1.0
Other	9.9	7.9	4.7	7.5	11.9	10.2	4.9	6.9
Not related	1.4	1.3	1.2	1.3	1.6	2.8	1.0	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	4,475,154	19,312	18,855	8,554	4,795	3,135	2,076	9,732

Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.3.7 Nationality and migration status of agricultural households

Like many other West African countries, Sierra Leone is a destination of immigrants, mostly from the West African sub-region. More recent movements within the sub-region has been facilitated by the free movement of the Economic Community of West African States (ECOWAS) and the common approach to migration by ECOWAS and the African Union (AU). These and many other protocols account for the higher volume of movement within the sub-region (Adepoju, 2010).

The agricultural sector is however not attractive to immigrants to Sierra Leone. As can be seen from Table 12.13, almost all (99.8 per cent) members of agricultural households are Sierra Leoneans, while just 0.2 per cent are nationals of other ECOWAS (West African) countries. The rest are foreigners from other African countries, the USA, other European countries and elsewhere.

Table 12.13 Nationality of members of agricultural households

Nationality	Number	Per cent	Head	All other members
Sierra Leonean	4,531,051	100.0	16.1	83.9
ECOWAS (West African)	10,401	100.0	23.1	76.9
All other African countries	29	100.0	13.8	86.2
United Kingdom	6	100.0	50.0	50.0
Other European Countries	17	100.0	35.3	64.7
United States of America	29	100.0	13.8	86.2
All other countries	80	100.0	31.3	68.8
Total	4,541,613	100.0	16.1	83.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.4 Agricultural activities

The 2015 Census enumerated agricultural households engaged in crop and animal production. The census enumerated 1,265,468 households out of which 732,461 (57.9 per cent) were agricultural households (Table 12.14). These are distributed unevenly across the four regions unevenly, with the majority (nearly 43 per cent) being in the Northern Region.

Table 12.14 Classification of households by agricultural activity and region

Region	Total	Percentage	Agriculture	Percentage	Non-agriculture	Percentage
Eastern	281,201	22.2	203,286	27.8	77,915	14.6
Northern	414,377	32.7	310,073	42.3	104,304	19.6
Southern	248,655	19.6	182,402	24.9	66,253	12.4
Western	321,235	25.4	36,700	5.0	284,535	53.4
Total	1,265,468	100	732,461	100.0	533,007	100.0

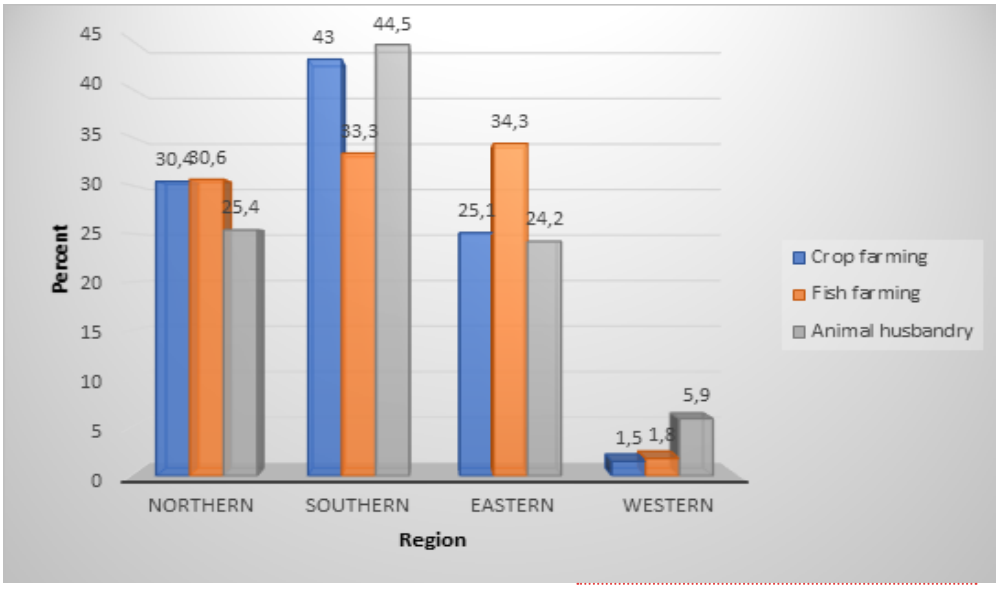
Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.4.1 Types of agricultural activities

The major agricultural activities carried out by the agricultural households were crop farming, fish farming and animal husbandry. The households engaged in crop farming were concentrated in the Northern, Southern and Eastern regions where almost all (98.1 per cent) were engaged in crop farming. The percentages ranged from 25 per cent in the Eastern Region to as high as 43 per cent in the Northern Region (Figure 12.2).

Households engaged in animal husbandry are also concentrated in the same regions but with Southern region accounting for the largest percentage. Fish farming households are quite evenly distributed across the Northern, Southern and Eastern regions, with each of them having around a third of them. The Western Region has a negligible percentage of all types of agricultural households.

Figure 12.2 Major agricultural activities undertaken by households by region



Source: Statistics Sierra Leone, 2015 Population and Housing Census

The type of agricultural activity, whether crop farming or fishing or animal husbandry by size of household is shown in Table 12.15. Generally, close to 80 per cent of each type of the agricultural activities was carried out in households that have four or more members. Household sizes of 10 and over members accounted for a third of fishing (34.3 per cent) and animal husbandry (33.6 per cent) activities while close to a third of the same household size engaged in crop farming (31.3 per cent). Furthermore, households with seven and over members account for more than half of all households engaged in the three different types of agricultural activities. Agricultural activities were carried out mostly in large households.

Table 12.15 Agricultural activity by size of household

Size of household	Type of agricultural activity					
	Crop farming		Fishing		Animal husbandry	
	Number	%	Number	%	Number	%
<4	43,319	15.2	14,520	12.9	34,090	13.8
4- 6	81,019	28.4	30,429	27.0	67,336	27.2
7- 9	71,806	25.2	29,083	25.8	62,910	25.4
10+	89,299	31.3	38,570	34.3	83,085	33.6
Total	285,443	100.0	112,602	100.0	247,421	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.4.2 Crops and acreage cultivated

Even though the agricultural households in Sierra Leone cultivated 10 different crops, according to both 2004 and 2015 censuses, five types were dominant: rice (on upland and lowland), cassava, coffee, cacao and oil palm.

The percentage of the total area cultivated for the production of these five crops declined between the two censuses, with the exception of rice (Table 12.16). Moreover, the area cultivated for rice (classified as upland and lowland rice at the 2015 Census) accounts for more than half (52.2 per cent) of the total acreage cultivated, rising from 30.5 per cent at the 2004 Census to 52.3 per cent at the 2015 Census.

The area for the cultivation of the other crops declined from the 2004 levels. The decline in the proportion of the land under coffee recorded the greatest decline; it decreased from 17.3 per cent to 5.9 per cent of the total land area for crop production. This is a 65.9 per cent decline from the 2004 level. Similarly, the area for the cultivation of sweet potato, maize, citrus and vegetables declined considerably. The area for the cultivation of cacao remained the same at the two censuses. Overall, rice has become the one single predominant crop being cultivated in Sierra Leone, grown in upland and lowland areas.

Table 12.16 Area cultivated by crop, 2004 and 2015

Crop	All regions	
	2004	2015
Upland rice		35.0
Lowland rice	30.5*	17.3
Cassava	12.7	10.6
Sweet potato	4.5	1.5
Groundnut	6.6	9.2
Maize	3.0	0.9
Coffee	17.3	5.9
Cacao	7.4	7.3
Oil palm	11.6	9.5
Citrus	2.6	0.3
Vegetables	3.7	2.5
Cashew	-	0.1
Total	100.0	100.0
Number	3,991,661	3,244,214

* Both types of rice were classified together in 2004

Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.4.3 Area of land cultivated

The distribution of area cultivated by crop is about the same for both rural and urban areas (Table 12.17). The same five types of crops dominate, with rice being the predominant crop in both places of residence. Cashew and vegetables covered slightly higher percentage of the land under cultivation in urban areas compared to rural areas. The rural areas, on the other hand, have a slightly higher percentage of land under cassava, groundnut, coffee and oil palm. The rural areas had more than half (52.5 per cent) of the land under rice, compared to 49.9 per cent in urban areas. Generally, cash crops covered a higher percentage of the land in rural areas than urban areas.

Table 12.17 Area cultivated (acres) by crop and place of residence

Crop	Total	Percentage	Rural	Percentage	Urban	Percentage
Upland rice	1,133,925	35.0	1,032,654	35.5	101,271	30.4
Lowland rice	560,384	17.3	495,486	17.0	64,899	19.5
Cassava	342,507	10.6	313,072	10.8	29,435	8.8
Sweet potato	50,105	1.5	39,483	1.4	10,622	3.2
Groundnut	299,580	9.2	271,269	9.3	28,311	8.5
Maize	28,984	0.9	24,907	0.9	4,077	1.2
Coffee	191,791	5.9	173,533	6.0	18,258	5.5
Cacao	235,749	7.3	202,369	7.0	33,380	10.0
Oil palm	307,593	9.5	278,138	9.6	29,454	8.8
Citrus	9,487	0.3	8,361	0.3	1,126	0.3
Vegetables	79,742	2.5	69,049	2.4	10,694	3.2
Cashew	4,368	0.1	2,506	0.1	1,861	0.6
Total	3,244,214	100	2,910,826	100	333,388	100

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The proportion of area under different crops by region varied. The highest percentages of land under a single crop were 91.4 per cent and 84.8 per cent respectively for cacao and coffee, both in the Eastern Region (Table 12.18). The Northern Region also accounted for far more than half of the area under lowland rice (59.9 per cent) and groundnut (59.7 per cent). The Southern Region accounted for slightly more than half (50.3 per cent) of the area under cassava. The Western Region had a generally negligible percentage of the various areas under the cultivation of all the different crops, ranging from as low as 0.1 per cent (cacao) to 6.7 per cent (sweet potato).

Table 12.18 Area cultivated by crop and region, 2015

Crop	All Regions		Region			
	Distribution		Northern	Southern	Eastern	Western
	Area	Percentage	Percentage			
Upland rice	1,133,925	100.0	37.4	26.6	35.4	0.5
Lowland rice	560,384	100.0	59.9	15.2	24.3	0.6
Cassava	342,507	100.0	32.5	50.3	15.8	1.4
Sweet potato	50,105	100.0	45.5	26.1	21.7	6.7
Groundnut	299,580	100.0	59.7	21.3	17.9	1.1
Maize	28,984	100.0	39.5	29.9	27.0	3.7
Coffee	191,791	100.0	4.7	10.3	84.8	0.2
Cacao	235,749	100.0	1.6	7.0	91.4	0.1
Oil palm	307,593	100.0	27.6	35.9	36.2	0.3
Citrus	9,487	100.0	38.0	24.5	35.6	1.9
Vegetables	79,742	100.0	40.4	39.2	15.9	4.5
Cashew	4,368	100.0	56.9	13.9	23.6	5.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Overall, the percentage of all and some of the crops sold varies among the regions as shown in Table 12.19. The percentage of all crops sold varies from 0.6 per cent in the Western Region to 69 per cent in the Eastern region. A negligible percentage of the households in all the regions sold all their rice. The percentage that did not sell any of the rice grown are the highest, ranging from 45 per cent of households in the Northern Region which grew lowland rice to 69 per cent of those in the Eastern Region which cultivated upland rice. Even though a high proportion of all the cash crops were sold in the Eastern, Northern and Southern regions, the Western Region sold a considerably low percentages of theirs, probably because they processed some of the cash crops for domestic consumption.

In general, the Northern Region recorded the highest percentage of the crops not sold at all compared to the other regions but in all the regions higher percentages of cassava, sweet potato, vegetables and oil palm were not sold compared with the other crops (Table 12.19).

Table 12.19 Households engaged in crop production by sale of produce and region

Crop		Region			
	All Regions	Northern	Southern	Eastern	Western
All crops					
Total Number	1,266,174	41.7	22.4	34.7	1.2
Sold all	162,092	13.5	16.9	69.0	0.6
Sold part	297,384	51.3	22.3	25.2	1.3
Sold None	524,172	39.8	24.3	34.6	1.3
Upland rice					
Total Number	456,470	41.2	23.6	34.7	0.5
Sold all	2,925	41.4	21.2	35.1	2.4
Sold part	170,516	50.7	20.2	28.4	0.6
Sold None	283,029	35.4	25.7	38.4	0.4
Lowland rice					
Total Number	231,335	55.8	14.6	28.9	0.7
Sold all	2,433	44.5	20.9	33.4	1.2
Sold part	105,142	66.2	11.4	21.8	0.6
Sold None	123,760	47.1	17.2	34.9	0.7
Cassava					
Total Number	147,936	36.3	42.6	18.8	2.3
Sold all	19,513	20.0	60.4	18.6	1.0
Sold part	92,952	39.9	38.3	20.0	1.8
Sold None	35,471	35.8	44.1	15.7	4.4
Sweet potato					
Total Number	30,866	46.9	22.0	24.0	7.2
Sold all	3,170	42.7	22.5	30.5	4.4
Sold part	19,098	48.2	20.9	25.1	5.7
Sold None	8,598	45.5	24.2	18.9	11.4
Groundnut					
Total Number	139,909	61.9	19.8	17.2	1.2
Sold all	7,806	43.5	20.9	34.4	1.2
Sold part	99,109	62.0	19.6	17.4	1.0
Sold None	32,994	65.9	19.8	12.4	1.8
Maize					
Total Number	15,330	42.2	24.8	28.6	4.5
Sold all	1,812	26.3	26.0	45.2	2.4
Sold part	9,056	44.4	23.0	29.0	3.7
Sold None	4,462	44.2	27.9	21.1	6.9

Table 12.19 Households engaged in crop production by sale of produce and region (continued)

Crop		Region			
	All Regions	Northern	Southern	Eastern	Western
Coffee					
Total Number	55,447	5.6	6.7	87.7	0.1
Sold all	46,512	3.2	5.9	90.9	0.0
Sold part	3,271	32.3	14.0	53.5	0.2
Sold None	5,664	9.5	9.2	81.0	0.4
Cacao					
Total Number	66,362	2.1	6.8	91.1	0.1
Sold all	56,072	1.2	5.3	93.5	0.0
Sold part	2,999	14.8	19.6	65.3	0.3
Sold None	7,291	3.8	13.1	82.8	0.3
Oil palm					
Total Number	77,278	31.1	28.7	40.0	0.1
Sold all	10,507	20.1	31.0	48.8	0.2
Sold part	52,689	32.3	27.9	39.8	0.1
Sold None	14,082	34.9	30.2	34.5	0.4
Citrus					
Total Number	3,647	38.5	20.7	38.2	2.6
Sold all	853	28.5	14.1	55.5	2.0
Sold part	2,004	42.6	19.5	35.7	2.2
Sold None	790	38.9	31.1	25.9	4.1
Vegetables					
Total Number	40,739	46.8	24.2	22.5	6.4
Sold all	10,270	55.6	24.6	15.0	3.9
Sold part	22,805	43.7	23.6	26.8	6.0
Sold None	7,664	43.1	25.8	19.9	11.2
Cashew					
Total Number	855	63.3	13.5	19.1	4.2
Sold all	219	62.1	16.0	19.2	2.7
Sold part	269	63.9	12.6	20.1	3.3
Sold None	367	63.5	12.5	18.3	5.7

Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.4.4 Livestock, numbers and keepers

The Northern Region's agricultural households owned the largest proportion of Sierra Leone's livestock, accounting for almost nine out of every 10 cattle, more than seven out of every 10 sheep and more than six out of every 10 goats numbered at the 2015 Census (Table 12.20). It also had close to half of the chickens and ducks. The percentage of animals owned in the other regions varied less, with the Western Region owning very few animals (with the exception of pigs).

Table 12.20 Number of livestock owned by type, number of households and by region

Region	Number of households	Type of Livestock					
		Cattle	Sheep	Goat	Pig	Chicken	Duck
Northern							
Number	239,973	403,215	409,245	516,170	17,018	2,099,462	187,365
Percentage	44.5	86.6	71.2	63.4	29.4	48.6	47.3
Southern							
Number	130,419	9,699	48,682	108,896	14,010	1,065,918	77,227
Percentage	24.2	2.1	8.5	13.4	24.2	24.7	19.5
Eastern							
Number	147,936	45,648	101,609	171,444	15,903	882,219	108,372
Percentage	25.4	9.8	17.7	21.1	27.5	20.4	27.4
Western							
Number	31,835	7,255	15,170	17,759	10,946	268,750	23,139
Percentage	5.9	1.6	2.6	2.2	18.9	6.2	5.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Generally, keepers across the country kept more cows than other animals, with a mean number of 19.4. Rural keepers had, unsurprisingly, on average more than urban keepers (19.9 to 16.0) (Table 12.21). The mean number of other animals kept was considerably lower, ranging from a little more than four to nine animals per keeper. In the urban areas the lowest mean number of animals kept was 4.4 for sheep while in rural areas, the lowest mean number was for goats (4.3).

Table 12.21 Livestock numbers and keepers by place of residence

Livestock	Total			Urban			Rural		
	No. of animals	No. of keepers	Mean animals per keeper	No. of animals	No. of keepers	Mean animals per keeper	No. of animals	No. of keepers	Mean animals per keeper
Cattle	465,817	24,015	19.4	51,827	3,244	16.0	413,990	20,771	19.9
Sheep	574,706	126,833	4.5	97,859	22,494	4.4	476,847	104,339	4.6
Goat	814,269	188,330	4.3	116,494	25,998	4.5	697,775	162,332	4.3
Pig	57,877	9,528	6.1	19,856	2,748	7.2	38,021	6,780	5.6
Chicken	4,316,349	505,036	8.5	909,422	102,063	8.9	3,406,927	402,973	8.5
Duck	396,103	83,507	4.7	111,465	19,953	5.6	284,638	63,554	4.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Unsurprisingly, at least two-thirds of the country's livestock and, therefore, their keepers, were in rural areas, with cattle making up 88.9 per cent. Pigs, chickens and ducks were a more popular choice of livestock in urban areas, probably because they are more easily reared in backyards with feed purchased from shops, instead of grazing.

Table 12.21a Livestock numbers and keepers by place of residence

Livestock	Animal Population			Keepers		
	Rural	Urban	Total	Rural	Urban	Total
Cattle	88.9	11.1	100	86.5	13.5	100
Sheep	83.0	17.0	100	82.3	17.7	100
Goat	85.7	14.3	100	86.2	13.8	100
Pig	65.7	34.3	100	71.2	28.8	100
Chicken	78.9	21.1	100	79.8	20.2	100
Duck	71.9	28.1	100	76.1	23.9	100

Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.4.5 Fishery

The vast majority (around 80 per cent and above) of households engaged in the fishery industry in three out of the four regions (Northern, Southern and Eastern) were in artisanal fishing. This was also true to a lesser extent in the Western Region, where 56.7 per cent of the households were also in artisanal fishing.Fish ponds accounted for small percentages, ranging from 4.2 per cent in the Southern Region to 14.3 per cent in the Northern Region. Similar percentages of households engaged in coastal fishing in all the regions, with the exception of the Western Region where coastal fishing formed a little more than a third (34 per cent) of fishing activities.

Table 12.22 Number of households into fishery by type and region

Region			Type of fishery		
	All households		Fish pond	Artisanal fishing	Coastal fishing
	Number	Total	Percentage		
All regions	245,957	100.0	7.7	86.6	5.8
Northern	81,943	100.0	14.3	78.0	7.8
Southern	84,428	100.0	4.2	90.5	5.2
Eastern	75,175	100.0	4.3	93.3	2.4
Western	4,411	100.0	8.9	56.7	34.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

12.4.6 Access to agricultural facilities

Access to agricultural facilities among the regions varies by type of facility and region. The percentage with access to equipment such as tractors and power tillers is the lowest (less than a tenth) and less than five per cent had access to threshers.

On average, more than half of agricultural households had access to rice mills but the percentage varied from as low as 12 per cent in the Western Region to 53.8 per cent in the Northern Region. At least 40 per cent had access to stores and floors. But the vast majority (more than nine out of every 10 households) did not have access to cassava graters and oil palm pressers.

Agricultural Business Centres (ABCs) were accessible to between 22 and 36 per cent of the households. Households in the Western Region (36 per cent) had the highest proportion of access to the ABCs while the Northern Region (22 per cent) recorded the lowest percentage.

Table 12.23 Agriculture households with access to agricultural facilities by region

Agricultural Facility		Region			
	All Regions	Northern	Southern	Eastern	Western
Tractors					
Have access	6.3	9.5	6.2	3.1	6.3
No access	93.7	90.5	93.8	96.9	93.7
Total	100.0	100.0	100.0	100.0	100.0
Number	265,857	99,966	24.3	34.6	1.3
Power tillers					
Have access	6.3	6.2	5.3	4.5	5.9
No access	93.7	93.8	94.7	95.5	94.1
Total	100.0	100.0	100.0	100.0	100.0
Number	99,966	35.4	25.7	38.4	0.4

Table 12.23 Agriculture households with access to agricultural facilities by region (continued)

Agricultural Facility		Region			
	All Regions	Northern	Southern	Eastern	Western
Threshers					
Have access	3.0	4.3	3.2	4.3	3.4
No access	97.0	95.7	96.8	95.7	96.6
Total	100.0	100.0	100.0	100.0	100.0
Number	99,966	68,645	94,942	2,304	265,857
Rice mills					
Have access	53.8	24.6	65.6	12.0	50.1
No access	46.2	75.4	34.4	88.0	49.9
Total	100.0	100.0	100.0	100.0	100.0
Number	99,966	68,645	94,942	2,304	265,857
Stores					
Have access	52.5	46.6	56.6	55.4	52.5
No access	47.5	53.4	43.4	44.6	47.5
Total	100.0	100.0	100.0	100.0	100.0
Number	99,966	68,645	94,942	2,304	265,857
Drying floors					
Have access	61.8	52.6	65.7	40.7	60.6
No access	38.2	47.4	34.3	59.3	39.4
Total	100.0	100.0	100.0	100.0	100.0
Number	99,966	68,645	94,942	2,304	265,857
Cassava Grater					
Have access	8.9	55.7	6.6	15.7	20.2
No access	91.1	44.3	93.4	84.3	79.8
Total	100.0	100.0	100.0	100.0	100.0
Number	99,966	68,645	94,942	2,304	265,857
Oil palm pressers					
Have access	1.6	5.2	1.8	3.2	2.6
No access	98.4	94.8	98.2	96.8	97.4
Total	100.0	100.0	100.0	100.0	100.0
Number	99,966	68,645	94,942	2,304	265,857
Agricultural Business Centres (ABC)					
Have access	21.9	29.6	29.9	35.8	26.9
No access	78.1	70.4	70.1	64.2	73.1
Total	100.0	100.0	100.0	100.0	100.0
Number	99,966	68,645	94,942	2,304	265,857

12.5 Summary, conclusions and recommendations

12.5.1 Summary

The 2015 Census enumerated a total of 732,461 agricultural households that engaged in crop, fishery and animal husbandry activities. Rice was the predominant crop produced. The distribution of the agricultural households indicated that 82 per cent resided in rural areas while 12 per cent were urban dwellers. The distribution of the agricultural households by region shows that more than nine out of every 10 of them were in three of the regions - Northern (42.3 per cent), Eastern (27.8 per cent) and Southern (24.9 per cent). The Western Region had only 5 per cent of the households.

The sizes of the agricultural households were generally large in both rural and urban areas. More than 80 per cent of rural and urban places of residence had four or more members. Only seven and nine per cent respectively of the rural and urban agricultural households had three or less members.

The age distribution of the agricultural households showed that the members were predominantly children and youth, just like the national population. Approximately 44 per cent were less than 15 years old. More than seven out of 10 of household members were children, teenagers and young adults combined.

Level of educational attainment was low among agricultural household members. For example, on average almost seven out of every 10 agricultural household heads were not literate in any language. A far higher proportion of the female household heads (85.2 per cent) than males (63.4 per cent) were illiterate.

The heads of the agricultural households were predominantly self-employed without employees, with the proportion ranging from a little more than half in the Western Region to 81 per cent in the Eastern Region. Some of these probably had household members working for them but they were enumerated as unpaid family workers.

Almost all (99.8 per cent) of the agricultural household members were Sierra Leoneans.

The vast percentage of livestock in Sierra Leone, were owned by households in the Northern Region, accounting for almost nine out of every 10 cattle, more than seven out of every 10 sheep and more than six out of every 10 goats. It also had close to half of the chicken and duck population.

The proportion of area under cultivation of different crops in the various regions varied greatly. The highest percentages of land under cultivation of a single crop were 91.4 per cent and 84.8 per cent respectively for cacao and coffee, both in the Eastern Region. The Northern Region also had more than half of the area under lowland rice cultivation and groundnut cultivation. The Southern Region accounted for slightly more than half (50.3 per cent) the area under cultivation of cassava, while the Western Region had a generally negligible percentage of land under cultivation.

Rice was the dominant crop in both rural and urban areas. Cashew and vegetables covered slightly higher percentages of land under cultivation in urban areas compared to rural areas. The rural areas on the other hand had a slightly higher percentage of land under cultivation of cassava, groundnut, coffee and oil palm.

Generally, the mean number of animals owned by keepers varied throughout the country. Cows are the most common animal to be kept (19.4 per keeper) but less were kept in urban and rural areas. The mean number of animals owned by keeper ranged from four goats per keeper to 19 cows per keeper in the entire country.

Access to agricultural facilities was generally limited in all the regions, and the percentages varied from facility to facility. The poorest access recorded was for equipment.

12.5.2 Conclusion

A very large percentage of the households in Sierra Leone enumerated at the 2015 Census were agricultural households.

They were mostly in rural areas and were predominantly made up of children and youth. The household sizes were large, usually four or more members. Levels of educational attainment were low. Foreigners form a negligible percentage of the population, suggesting that the country's agricultural sector is not attractive to immigrants.

The heads of agricultural households were predominantly self-employed without employees, even though they might have household members working for them who were enumerated as unpaid family workers. Rice was the dominant crop cultivated in both rural and urban areas.

The animal population and keepers were concentrated in rural areas. Fish ponds accounted for small percentages of fishing activities. Large percentages of most crops produced were not sold. Generally, the majority of the households did not have access to agricultural facilities.

12.5.3 Recommendations

Agricultural production is a major economic activity in Sierra Leone. Since the vast majority of households is engaged in various agricultural activities, investment in the agricultural sector should be a priority. Access to agricultural equipment should be improved, to enable less laborious methods of cultivation.

The proportion of agricultural produce sold is quite small. Cultivation on a commercial scale should be promoted so that sales of produce can be increased in all the regions. Marketing of produce also needs to be supported by a better transportation network and storage facilities. However, commercial agricultural activities need to be promoted before these are provided. Some of the agricultural produce should be processed in order to increase its value, enabling households to buy access to agricultural facilities. This could also prevent post-harvest loss, a problem which faces households. Once commercial production has been sufficiently increased, the export market should also be explored and promoted.

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CHAPTER 13: POVERTY AND DURABLE ASSETS

13.1 Introduction

Sierra Leone ranks 181 out of 188 countries on the UNDP Human Development Index (HDI) scoring 0.413, classed as 'low human development' (UNDP, 2015). There is no reason why a country with such a small population and such rich mineral wealth and agricultural potential should be poor.

The current challenges facing the country are partly due to the legacy of the 11-year Civil War and the natural disasters (Ebola, mud slides and flooding) which have affected the country in recent years. At the end of the war, the Government drew up a number of policies to help in reconstruction, nation building and to improve the living conditions of its people.

The policies are the Sierra Leone Interim Poverty Reduction Strategy Paper (SL-I-PRSP); the Sierra Leone National Recovery Strategy (SRNRS); Sierra Leone Poverty Reduction Strategy Paper (SL-PRSP) 2005-2007: A national programme for food security, job creation and good governance, (SL-PRSP I); Sierra Leone Poverty Reduction Strategy Paper 2008 - 2012: An agenda for change (SL-PRSP II); and the Sierra Leone Poverty Reduction Strategy Paper 2013 -2018: The Agenda for Prosperity, Road to Middle Income Status (SL-PRSP III).

The objectives of the SL-I-PRSP were implemented in two stages. The first stage was the transitional phase (2001-2002). Its aims were threefold: restoring national security and good governance; re-launching the economy; and providing basic social services to the most vulnerable groups. The second stage was the medium-term (2003-2004) and focussed on good governance, revival of the economy and social sector development (IMF 2005).

The SRNRS focused on five main areas: the consolidation of state authority and peace-building; promotion of reconciliation and enforcement of human rights; facilitating resettlement and reintegration and rebuilding communities; facilitating access to previously inaccessible areas and expediting service delivery; and stimulating economic recovery (IMF 2005).

The SL-PRSP I was constructed around three pillars: good governance, peace and security; food security, job creation and growth; and human development (IMF 2005). The SL-PRSP II focused on four key areas: energy – providing reliable power supply to the country; agriculture – raising quantity and value-added in agricultural and fishing activities; transportation – develop national transportation network to enable movement of goods and people and thereby facilitate increased investment and economic activity; and human development – ensure sustainable human development through the provision of improved social services (RoSL, no date stated in publication).

The current SL-PRSP III, an agenda for prosperity, is built around eight pillars: diversified economic growth; managing natural resources; accelerating human development; international competitiveness; labour and employment; social protection; governance and public sector reform; and gender and women's empowerment (GoSL, no date stated in publication).

During the implementation of each policy paper, progress is monitored, implementation problems assessed and steps taken to eliminate or minimize the effects of constraints. Lessons learnt from each stage are carried forward to ensure previous mistakes are not repeated. This has ensured 'a generally satisfactory experience' with each policy.

The country is currently embarking on 'the agenda for prosperity' whose main thrust is the country's Vision 2035 – to propel Sierra Leone into being a middle-income country with 80 per cent of its people living above the poverty line. The Government has consistently acknowledged the role of the international community and its development partners in this effort (IMF 2011, 2008).

According to the World Bank and Statistics Sierra Leone (2014), the incidence of poverty declined from 66.4 per cent in 2003 to 52.9 per cent in 2011. Rural poverty fell from 78.7 per cent in 2003 to 66.1 per cent in 2011, while urban poverty declined from 46.9 per cent in 2003 to 31.2 per cent in 2011. Poverty also declined in the Northern, Eastern, and Southern regions, but increased in the Western Region. Poverty declined from 86.0 to 61.3 percent in the Eastern Region, from 80.6 to 61.0 per cent in the Northern Region, and from 64.1 to 55.4 per cent in the Southern Region, but increased in the Western Region from 20.7 to 28.0 per cent. Similar declines are also reported by the SL-PRSP III (GoSL). These declines in poverty may be attributed to the programmes which have been implemented in the country since 2001.

The purpose of this chapter is to analyse the 2015 Census data to assess trends and extent of changes in poverty.

13.2 Definition and measurement of poverty. Non-monetary poverty.

13.2.1 Definition of poverty

Poverty is the 'condition where people's basic needs for food, clothing and shelter are not being met' (Business dictionary). It is usually defined in absolute or relative terms.

Absolute poverty measures poverty in terms of the amount of money needed to meet basic needs (World Bank) or in terms of calories or nutrition required 'to support a minimum level of physical health' (World Health Organization). Relative poverty, on the other hand, 'defines poverty in relation to the economic status of other members of the society: people are poor if they fall below prevailing standards of living in a given societal context' (UNESCO). That is, relative poverty occurs when people do not enjoy a certain minimum level of living standards as determined by a government (and enjoyed by the bulk of the population) (Business dictionary, 2017). This definition is stated very succinctly by Townsend as 'the absence or inadequacy of those diets, amenities, standards, services, and activities which are common or customary in society' (Townsend, 1979).

The United Nations definition of absolute poverty, provided in the Copenhagen Declaration at the World Summit for Social Development in 1995, defines poverty in non-monetary terms and is comprehensive in that it encompasses the multi-facetted nature of poverty.

It states:
Absolute poverty is a condition characterized by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education, and information. It depends not only on income but also on access to social services.

This definition of poverty will be adopted for this study as it is operationalized in the UNDP Multidimensional Poverty Index (MPI). It reveals both the direct effects - illiteracy, hunger and malnutrition; shortened life spans; illness or death from preventable diseases; and poor health of pregnant women and mothers - and indirect effects - lack of access to essentials such as energy, sanitation, clean drinking water, healthcare, transportation and communication services - of poverty on people (Gale, 2007).

13.2.2 Measurement of poverty

For this report, poverty will be measured using the ten indicators of the MPI with appropriate modifications. The index measures poverty across three dimensions namely, education, health and standard of living. Education and health are measured using two indicators each, while living standards has six indicators. The unit of analysis for this index is the household. Each household is described as 'deprived' or 'not deprived' in each indicator, based on certain thresholds of the indicator. The indicator thresholds for households to be considered deprived is described by the UNDP MPI (Alkire & Santos, 2011) and summarized below.

13.2.2.1 Education

Years of schooling: No household member has completed at least six years of schooling.

School attendance: At least one school-age child is not attending school.

13.2.2.2 Health

Child mortality: Death of at least one child under five.

Maternal mortality: At least one death due to pregnancy or child birth.

13.2.2.2 Standard of living

Electricity: No access to electricity.

Drinking water: No access to clean drinking water, which is defined as water from pipe indoors, pipe in compound, public tap, protected ordinary well and protected ordinary spring. In addition, the source of water must be within the compound or less than half mile away.

Sanitation: No access to improved sanitation or, if improved, it is shared. Improved sanitation is defined as ventilated improved pit (VIP), flushed inside, flushed outside toilets and pit latrine. All these must be private (that is not shared).

Floor: No access to improved floor. Improved floor means floor material must not be sand, dirt or dung.

Cooking fuel: No access to improved cooking fuel. This means cooking fuel used must be electricity or gas or kerosene or solar.

Assets:

a) **Access to information**: Not owning at least one asset related to access to information such as radio, television or mobile phone.
b) **Mobility:** Not owning at least one asset related to mobility (bicycle, motorbike, car, truck, boat).
c) **Livelihood:** Not owning at least one asset related to livelihood (refrigerator or freezer, livestock). Livestock means either a head of cattle, two goats, two sheep or ten chickens.

In the MPI, the health dimension is measured by child mortality and nutrition. However, no data on nutrition were collected in the census so the nutrition indicator has been replaced by maternal mortality. This satisfies the requirement that the data for the measurement of the MPI should all come from one single survey or census. This substitution works because maternal mortality is a direct effect of poverty. For this report, the three components of the asset indicator have been shown separately, to identify the specific areas of deprivation for the attention of policy makers.

13.3 Data sources and limitations of study

Data for this study are from the 2015 Population and Housing Census, provided by Statistics Sierra Leone (SSL). Secondary data for 2004 were obtained from the Analytical Report on Housing Situation and Characteristics for the 2004 Population and Housing Census, and for 1985 from the Analytical Report, 1985 Population and Housing Census of Sierra Leone.

This report is limited to a descriptive analysis of each indicator. The computation of the MPI and its disaggregation by indicators, regions and place of residence is beyond its scope.

The analysis by indicators is restricted to the 2015 Census data. A comparative analysis with data from previous censuses is limited to the living standards indicators because:

- There is a lack of published data in a form consistent with the current method of analysis; for example, ownership of durable assets in 2004. (However, comparisons with data from other surveys and investigations are carried out where data is available).
- Some data items were not collected in previous censuses, for example, ownership of durable assets was not collected in 1985.

13.4 Descriptive analysis of non-monetary poverty

For simplicity, ease of understanding and to highlight the relevant aspect of each indicator under consideration, this report has adopted the nomenclature used by GSS (2013) with reference to the 10 indicators of the MPI.

13.4.1 Education

It has been noted that education is measured by years of schooling (attainment) and school attendance. A household is considered deprived if no member has completed at least six years of schooling (primary education). Consequently, the educational attainment indicator is described as 'primary school completion' since that is precisely what it seeks to measure.

For the school attendance indicator, a household is deprived if at least one child of school going age is not in school. Thus, this indicator is aptly referred to as 'child school attendance'.

Educational attainment is the highest level of schooling each student attended and successfully completed (UN year). In the education sector, primary school completion is measured by the gross completion rate (GCR) for that level. It is the total number of pupils completing the final year of primary education, regardless of age, expressed as a percentage of the official primary school graduation age.

Alghali et al (2005) observed that 'provision of quality, relevant and equitable learning opportunities for all is the policy thrust and overarching objective of education in Sierra Leone'. Indeed, this is a succinct summary of the various national legislations (Education Act 2004, the Child Rights Act 2007), policies (The Sierra Leone Education Sector Plan 2014-2018, The Sierra Leone Sector Capacity Development Strategy 2012-2016 and the Sierra Leone Education Sector Plan 2007-2015) and international goals to which Sierra Leone is a signatory (Education For All, and Millennium Development Goal (MDG) of primary school completion rate of 100 per cent by 2015).

The Government of Sierra Leone introduced a fee-free primary education policy in the 2002/03 academic year (UNESCO 2013). The country also had a national and MDG target of a primary school completion rate of 100 percent by 2015 (SSL 2004).

13.4.1.1 Primary school completion

The primary school completion deprivation status of households by region and place of residence is shown in Table 13.1. At the national level, two out of five households are deprived, and there are differences by region. Apart from the Western Region, where the percentage of deprived households is half of the national (one out of five), the other three regions have rates higher than the national value. The Northern Region has the highest figure with half of all its households being deprived, whilst the rates are nearly 43 per cent and 48 per cent for Eastern and Southern regions respectively.

Regional variations in deprivation of households in primary school completion rates have persisted since 2004. SSL (2006) reported significant differences in GCRs among the regions in that year. The Western Region had the highest GCR (88 per cent) and the Northern Region had the lowest (39 per cent).

There are differences by place of residence. Rural households are three times (30.8 per cent) more likely to be deprived than urban households (9.7 per cent). Similar differences (33.6 per cent, 9.1 per cent) are recorded in the Eastern Region. However, in the Northern and Southern regions, rural households are several times worse off than their urban households (7 times and 12 times respectively). It is only in the Western Region that rural households are 18 times better off than their urban counterparts.

In 2007, Nishimuko reported that the completion rate of primary education in Sierra Leone is still below 60 per cent nationally, but this increased to 74 per cent by 2011 (UNESCO 2012).

A number of studies (SLDHS 2013, UNESCO 2013, SSL 2014) have shown that the inability of pupils to complete school is due partly to financial reasons (inability of parents to pay school fees, provide school uniforms, other costs). The issue of school fees in household expenditure costs for children in public schools is disturbing, especially as the Government officially introduced fee-free education in public primary and junior secondary school levels in 2002/03 (Nishimuko 2007, UNESCO 2013). Indeed, the 2011/2012 Sierra Leone Integrated Household Survey (SLIHS) revealed that out of five reasons for low school attendance, no money for fees or books accounted for 77 per cent (SSL 2014).

Table 13.1 Household deprivation status in primary school completion by region and place of residence

		Primary school completion deprivation status						
Region		Not deprived			Deprived			Total No. of households
		Total	Rural	Urban	Total	Rural	Urban	
Eastern	No. of HH	160,978	72,891	88 087	120,223	25,673	94,550	281,201
	% of Total HH	57.25	25.92	31.33	42.75	9.13	33.62	100.0
Northern	No. of HH	206,501	80,311	126,190	207,876	27,092	180,784	414,377
	% of Total HH	49.83	19.38	30.45	50.17	6.54	43.63	100.0
Southern	No. of HH	128,844	40,124	88,720	119,811	9,306	110,505	248,655
	% of Total HH	51.8	16.1	35.7	48.2	3.7	44.4	100.0
Western	No. of HH	257,319	251,829	5,490	63,916	60,508	3,408	321,235
	% of Total HH	80.1	78.4	1.7	19.9	18.8	1.1	100.0
All Regions	No. of HH	753,642	445,155	308,487	511,826	122,579	389,247	1,265,468
	% of Total HH	59.6	35.2	24.4	40.5	9.7	30.8	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

13.4.1.2 Child school attendance

The second indicator for assessing poverty in education is child school attendance. Participation in education is usually measured by the gross enrolment ratio (GER) and the net enrolment ratio (NER). The GER is the total enrolment at a particular level of education, regardless of age, expressed as a percentage of the official school-age population for that particular level in a given school year. The NER is total enrolment of the official school age pupils at a particular level, expressed as a percentage of the official school-age population for that particular level in a given school year.

The NER can be used to estimate the number of children not enrolled in school. Deprivation status in child school attendance is presented in Table 13.2. A household is deprived in child school attendance if any child aged between six and 14 years in that household is not attending school. For the country as a whole, 22.3 per cent of households were deprived in 2015. This result is consistent with findings reported by SSL, that in 2004, 29 per cent of 6 to 11 year olds had never attended school (SSL 2004) and a decade later, that nearly half (48 per cent) of all Sierra Leoneans had never had any formal education. One third of these were children of school-going age (less than 18 years old) (SSL 2014).

The data in Table 13.2 shows variation in child school attendance by region. Eastern, Northern and Southern regions have more than 20 per cent of their households deprived in child school attendance while the Western Region has 9 per cent. The Northern Region is the most deprived (30.3 per cent), and the Western Region is the most privileged.

These regional differentials have remained unchanged during the past decade, as confirmed by SSL (2006). It noted that the Western Region had the highest NER and GER for both primary and junior secondary schools, while the Northern Region had the lowest NER and GER at both levels. However, in the UNESCO (2013) report, the Southern Region had the lowest NER for the three age groups (6-11, 12-14 and 15-17) in 2010, even though the Northern Region had the lowest rates in 2003/4.Rural-urban differentials persist with child school attendance too. At the national level, the proportion of deprived households in rural areas (31.8 per cent) is about three times that of urban households (9.7 per cent). This disparity is also confirmed by UNESCO (2013) who noted that differences by place of residence are apparent for all age groups.

The Southern and Northern regions recorded the largest differences in the proportion of households deprived in child school attendance among rural and urban households. In the Southern Region, 2.3 per cent of urban households are deprived compared to 23.1 per cent for rural households. For the Northern Region, the proportion of deprived rural households (26.3 per cent) is nearly seven times that of urban households (4 per cent). Unlike the other three regions, the Western Region has a higher proportion of deprived households in urban areas (8.6 per cent) than in rural areas (0.4 per cent).

The Government's free education at the basic (primary and junior secondary) level and introduction of a fine or a term of imprisonment (or both) for parents or guardians who do not send their children or wards to school have brought some positive outcomes in terms of increased access to primary education (Nishimuko 2007). But the main objectives are yet to be achieved. The fact that over 20 per cent of households are deprived shows that a lot more needs to be done to ensure universal education for all children in Sierra Leone.

Table 13.2 Household deprivation status in child school attendance by region and place of residence

		Child school attendance deprivation status						
Region		Not deprived			Deprived			Total No. of households
		Total	Urban	Rural	Total	Urban	Rural	
Eastern	No. of HH	216,544	86,458	130,086	64,657	12,106	52,551	281,201
	% of Total HH	77.0	30.7	46.3	23.0	4.3	18.7	100.0
Northern	No. of HH	288,979	90,874	198,105	125,398	16,529	108,869	414,377
	% of Total HH	69.7	21.9	47.8	30.3	4.0	26.3	100.0
Southern	No. of HH	185,495	43,822	141,673	63,160	5,608	57,552	248,655
	% of Total HH	74.6	17.6	57.0	25.4	2.3	23.1	100.0
Western	No. of HH	292,346	284,742	7,604	28,889	27,595	1,94	321,235
	% of Total HH	91.0	88.6	2.4	9.0	8.6	0.4	100.0
All Regions	No. of HH	983,364	505,896	477 ,68	282,104	61,838	220,266	1,265,468
	% of Total HH	77.7	40.0	37.7	22.3	4.9	17.4	100.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

To help evaluate previous educational policies and programmes and to chart the path for the future, the Global Partnership for Education Secretariat approved USD 361,000 for Sierra Leone in April 2017 to develop an education sector assessment and update the current education sector plan (GPE 2017).

13.4.2 Health

The health dimension of household poverty is measured by child and maternal mortality. Tables 13.3 and 13.4 present the data on households that experienced at least one child death and one maternal death respectively, by region and place of residence.

13.4.2.1 Child mortality

Sierra Leone has the highest rate of under-5 child mortality in the world (182 deaths before the age of five for every 1,000 children born) (UN Tribune 2014).

Child mortality, also referred to as under-five mortality, is the death of a person before they reach age five. It is the probability that a new born baby will die before celebrating their fifth birthday, if subject to age-specific mortality rates of the specified year.

According to the UN: "The under-5 mortality rate is considered a principal indicator of a country's development as it is the result of a number of factors including the health of mothers, the level of immunization, availability of maternal and child health services, income and food availability, availability of clean water and safe sanitation and the overall safety of the child's environment" (UN 2014).

Table 13.3 shows that less than two per cent of all households in the country are deprived in child mortality, that is, they lost at least one child under age five in the census year 2015. The Sierra Leone Demographic and Health Survey (SLDHS) 2013 (SSL & ICF 2014) reports a decline in under-five mortality rates from 227 deaths per 1,000 live births during 1998-2004 to 156 deaths per 1,000 live births in 2008-2013.

The Sierra Leone multiple indicator cluster surveys (SLMICS) estimate under-five mortality rates of 267 and 217 deaths per 1,000 live births for 2005 and 2010 respectively (SSL & UNICEF-SL, 2007 and 2011). Even though the levels of the estimates of under-five mortality are not the same (probably due to differences in methods of estimation), the decline in the under-five mortality is also confirmed by the estimates from SLMICS.

There are regional differences in the percentage of households deprived in child mortality. Table 13.2 shows that the Southern Region has the highest proportion of deprived households (2.4 per cent), while the Western Region has the lowest (0.9 per cent). Eastern and Northern regions have the same proportion of households deprived in child deaths (1.8 per cent).

Similar regional differences were also noted by SSL and UNICEF-SL (2011) and SSL and ICF (2014). SSL and UNICEF-SL reported that under-five mortality rates differ little between the Eastern, Southern and Northern regions (224, 224 and 219 deaths per 1,000 live births respectively) in 2010; but are 30 per cent lower in the Western Region. The under-five mortality rates from the 2013 demographic and health survey range from a low of 157 deaths per 1,000 live births in the Western Region to a high of 200 deaths per 1,000 live births in the Eastern Region (SSL & ICF 2014).

The data also show child deaths are twice as high in rural than in urban areas. Under-five mortality rates estimated by SSL and ICF (181 and 158 death per 1,000 live births for rural and urban areas respectively) and SSL and UNICEF-SL (220 and 202 deaths per 1,000 live births for rural and urban areas respectively) also reveal these differentials by place of residence. The differences by place of residence also manifest across regions. While proportions of urban households deprived in child deaths are less than two per cent in each region, proportions deprived in rural areas are two per cent or more in every region.

Table 13.3 Households that experienced death of at least one child under-five by region and place of residence

Region	Total			Urban			Rural		
	Total households	Number of affected households	As % of Total households	Total house-holds	Number of affected households	As % of Total households	Total house-holds	Number of affected households	As % of Total households
Eastern	281,201	5,129	1.8	98,564	1,562	1.6	182,637	3,567	2.0
Northern	414,377	7,602	1.8	107,403	1,453	1.4	306,974	6,149	2.0
Southern	248,655	6,066	2.4	49,430	595	1.2	199,225	5,471	2.7
Western	321,235	2,995	0.9	312,337	2,811	0.9	8,898	184	2.1
All Regions	1,265,468	21,792	1.7	567,734	6,421	1.1	697,734	15,371	2.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

13.4.2.2 Maternal mortality

A maternal death is the death of a female: 'from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes). Maternal mortality includes deaths during pregnancy, childbirth, or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy ..." (IndexMundi 2017). Maternal deaths are usually measured by the maternal mortality ratio (MMR) which is the number of maternal deaths per 100,000 live births for a specified year.

Information on maternal deaths as presented in Table 13.4 shows that 0.3 per cent of households experienced a maternal death in the entire country. The SLDHS of 2013 recorded a MMR of 1,165 (SSL and ICF (2014). Also, estimates from 2015 indicate that 1 in 17 mothers in Sierra Leone have a lifetime risk of death associated with childbirth (UNICEF 2016). Regional differences are slight, with differences of only 0.1 per cent more or less than the national average (Eastern and Western regions respectively), or values equal to the national average (Northern and Southern regions).

The deprivation status of households in respect to maternal deaths by place of residence also shows slight differences. There is a higher proportion in rural (0.3 per cent) compared to urban areas (0.2 per cent). There are no differences by place of residence in the Eastern and Northern regions. The Southern and Western regions recorded the same figures and differences as observed in the entire country.

The causes of the high maternal deaths are well documented: post-partum haemorrhage (bleeding after childbirth), obstructed labour, anaemia and toxaemia (pregnancy-induced hypertension). The high maternal mortality is also due to the fact that about 73 per cent of births in Sierra Leone occur in rural areas, where access to health care during pregnancy is limited (Rau 2015, UNICEF 2016). As noted above, these rural households also contribute the majority of child deaths.

To help reduce the high rates of child and maternal mortality, the 2010 Health Care Act introduced a programme of free healthcare for pregnant and lactating women and for children under the age of five. This led to an increase in the number of antenatal care visits. However, the policy did not yield the desired impact, as increased numbers in antenatal care visits was not sustained.

It has also been suggested that the Government increase health infrastructure by having more well equipped national referral centres and peripheral health units to provide comprehensive maternal care. An increase in skilled workers to manage emergency cases, and the deployment of more doctors countrywide to respond to emergency care is also required. Public sensitization on the need to attend antenatal clinic is also essential (Turay 2016).

Currently, a major objective is to provide at least, five fully functional Basic Emergency Obstetrical and Neonatal Care (BEmONC) centres and one Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) centre in each of the 14 districts in the country. This is being funded by the European Union through UNICEF (UNICEF 2016).

Table 13.4 Households that experienced maternal death by region and place of residence

Region	Total			Urban			Rural		
	Total households	Number of affected households	As % of Total households	Total house-holds	Number of affected households	As % of Total households	Total house-holds	Number of affected households	As % of Total households
Eastern	281,201	1,028	0.4	98,564	370	0.4	182,637	658	0.4
Northern	414,377	1,199	0.3	107,403	279	0.3	306,974	920	0.3
Southern	248,655	659	0.3	49,430	82	0.2	199,225	577	0.3
Western	321,235	499	0.2	312,337	469	0.2	8 898	30	0.3
All Regions	1,265,468	3,385	0.3	567,734	1,200	0.2	697,734	2,185	0.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

13.4.3 Standard of living

This dimension is measured by six indicators: drinking water, sanitation facilities, type of cooking fuel, material used for floor, electricity and household assets. Previous poverty studies and reports, such as the 2004 Census poverty report, did not consider these indicators separately (SSL, 2006). However, they were included (among other variables) in a multidimensional composite index of poverty. Consequently, comparison with earlier reports on poverty is not possible for these indicators.

13.4.3.1 Access to clean drinking water

Clean drinking water is defined as water from a tap inside the house or in the compound, public tap, protected ordinary well and protected ordinary spring. In addition to the listed sources, the distance to the water source must be less than half a mile away.

Any household whose water source is not one of those listed, or is more than half a mile away, is deprived in access to clean water. In 2015, 48.4 per cent of households were deprived in access to clean water (Table 13.5).

Western and Eastern regions had less than half of their households being deprived in access to clean water, while Northern and Southern regions had a little more than half of their households being deprived.

Table 13.5 shows that apart from the Western Region, all the other three regions have higher percentages of households deprived in rural than in urban areas. The Southern Region has the lowest percentage (6.3) of deprived urban households, whilst the Western Region has the highest (32.7) of such households. In rural settlements, the Western Region has the lowest percentage (1.5) of deprived households, with the Northern Region having the highest (49.3 per cent).

An attempt to obtain similar data from previous censuses for trend analysis yielded limited results. The secondary data for these censuses did not provide detailed information on the sources of drinking water as recorded in the 2015 Census. Hence, the trend analysis should be viewed with caution. The data suggests that the level of deprivation in access to clean drinking water has been on the decline from 1985 to 2015 (82, 73.8 and 48.4 per cent for 1985, 2004 and 2015 respectively).

Table 13.5 Households' deprivation status in access to clean drinking water by region

		Household access to clean drinking water deprivation status						
Region		Not deprived			Deprived			Total No. of households
		Total	Urban	Rural	Total	Urban	Rural	
Eastern	No. of HH	154,952	68,567	86,385	126,249	29,997	96,252	281,201
	% of Total HH	55.1	24.4	30.7	44.9	10.7	34.2	100.0
Northern	No. of HH	172,996	70,447	102,549	241,381	36,956	204,425	414,377
	% of Total HH	41.7	17.0	24.7	58.3	8.9	49.3	100.0
Southern	No. of HH	114,080	33,680	80,400	134,575	15,750	118,825	248,655
	% of Total HH	45.9	13.5	32.3	54.1	6.3	47.8	100.0
Western	No. of HH	211,03	207,303	4,000	109,932	105,034	4,898	321,235
	% of Total HH	65.8	64.5	1.2	34.2	32.7	1.5	100.0
All Regions 2015	No. of HH	653,331	379,997	273,334	612,137	187,737	424,400	1,265,468
	% of Total HH	51.6	30.0	21.6	48.4	14.8	33.5	100.0
All Regions 2004	No. of HH	*	*	*	*	*	*	819,484
	% of Total HH	26.2^	*	*	73.8^	*	*	100.0

Clean drinking water = Piped indoors, piped in compound, public tap, protected ordinary well, and protected ordinary spring. In addition source of water must be within compound or less than half a mile away.
*Data not available. ^Data classified as tap, wells (all types), rivers and others. Tap was chosen as improved source. Was not possible to incorporate distance to water source due to secondary source of data.
Sources: Compiled from [1] Statistics Sierra Leone, 2004 Population and Housing Census. Analytical Report on Poverty. [2]Central Statistics Office (). The Analytical Report, 1985 Population and Housing Census of Sierra Leone. [3] Statistics Sierra Leone, 2015 Population and Housing Census.

13.4.3.2 Improved sanitation

According to the MDGs, improved sanitation facilities are more likely to prevent human contact with human excreta than unimproved facilities. A household is considered to have access to improved sanitation if the household has some type of flush toilet or latrine, or VIP or composting toilet (Santos and Alkire, 2011). Unimproved sanitation facilities include pit latrine without slab or open pit, bucket, no facilities or bush, field or river bed.

Improved sanitation facilities must be for the exclusive use of each household. If the improved facility is shared with one or more households, the households are considered deprived.
In 2015, three out of four households were deprived in the entire country as well as in each region (Table 13.6). A total of 31.7 per cent of urban households were deprived compared to 43 per cent for rural households.

The higher levels of deprivation in rural areas compared to urban areas are replicated in all regions except the Western. The Southern Region has the lowest proportion (10.6 per cent) of deprived urban households whilst the Western Region has the highest (72.4 per cent). For rural areas, the Western Region has the lowest percentage (2.1) of deprived households, while each of the other three regions has more than half of their households deprived in improved sanitation. Comparable data for 2004 shows that 84.6 per cent of all households were deprived in improved sanitation, thus, showing a decline of about 10 per cent from 2004 to 2015.

Table 13.6 Households' deprivation status in access to improved sanitation by region and place of residence

Region		Not deprived			Deprived			Total No. of households
		Total	Urban	Rural	Total	Urban	Rural	
Eastern	No. of HH	65,796	30.181	35,615	215,405	68,383	147,022	281,201
	% of Total HH	23.4	10.7	12,7	76.6	24.3	52.3	100.0
Northern	No. of HH	109,344	33,102	76,242	305,033	74,301	230,732	414,377
	% of Total HH	26.4	8.0	18,4	73.6	17.9	55.7	100.0
Southern	No. of HH	62,025	22,988	39,037	186,630	26,442	160,188	248,655
	% of Total HH	24.9	9.2	15,7	75.1	10.6	64.4	100.0
Western	No. of HH	81,970	79,701	2,269	239,265	232,636	6,629	321,235
	% of Total HH	25.5	24.8	0.7	74.5	72.4	2.1	100.0
All Regions 2015	No. of HH	319,135	165,972	153,163	946,333	401,762	544,571	1,265,468
	% of Total HH	25.2	13.1	12.1	74.8	31.7	43.0	100.0
All Regions 2004	No. of HH	*	*	*	*	*	*	819,484
	% of Total HH	15.4	*	*	84.6	*	*	100.0

Improved sanitation = VIP, flushed inside, flushed outside or pit. All these must be private.
*Data not available.
Sources: Compiled from [1] Statistics Sierra Leone, 2004 Population and Housing Census, Analytical Report on Poverty. [2] Central Statistics Office (). The Analytical Report, 1985 Population and Housing Census of Sierra Leone. [3] Statistics Sierra Leone, 2015 Population and Housing Census

13.4.3.3 'Improved' cooking fuel

A household is considered deprived in cooking fuel if the household cooks with dung, charcoal or wood. Nearly all households (97.8 per cent) were deprived in improved cooking fuel in 2015 (Table 13.7).

The Western Region has the lowest deprivation of 94.4 per cent of household, whilst the Eastern Region has the highest proportion of 99.2 per cent. As usual, there are higher levels of deprivation among rural households and 43.1 per cent of urban households are deprived compared to 54.8 per cent of rural households. The Western Region is again the exception. It has the highest proportion (91.7 per cent) of urban households deprived in improved cooking fuel while the Southern Region has the lowest (19.5 per cent). In rural areas, the Western Region has the lowest percentage (2.7) of deprived households; whilst the Southern Region has the highest (79.6 per cent). Indeed, the percentages for the other three regions exceed 60 per cent.

The percentage of deprived households has been on the increase over the three decades, having increased from 94.5, 95.3 and 97.8 per cent in 1985, 2004 and 2015 respectively.

Table 13.7 Households' deprivation status in access to improved cooking fuel by region and place of residence

Region		Not deprived			Deprived			Total No. of households
		Total	Urban	Rural	Total	Urban	Rural	
Eastern	No. of HH	2,151	1,348	803	279,050	97,216	181,834	281,201
	% of Total HH	0.8	0.5	0.3	99.2	34.6	64.7	100.0
Northern	No. of HH	4,658	2,192	2,466	409,719	105,211	304,508	414,377
	% of Total HH	1.1	0.5	0.6	98.9	25.4	73.5	100.0
Southern	No. of HH	2,398	1,024	1,374	246,257	48,406	197,851	248,655
	% of Total HH	1.0	0.4	0.6	99.0	19.5	79.6	100.0
Western	No. of HH	18,113	17,903	210	303,122	294,434	8,688	321,235
	% of Total HH	5.6	5.6	0.1	94.4	91.7	2.7	100.0
All Regions 2015	No. of HH	27,320	22,467	4,853	1,238,148	545,267	692,881	1,265,468
	% of Total HH	2.2	1.8	0.4	97.8	43.1	54.8	100.0
All Regions 2004	No. of HH	*	*	*	*	*	*	819,484
	% of Total HH	4.7	*	*	95.3	*	*	100.0
All Regions 1985	No. of HH	*	*	*	*	*	*	475,060
	% of Total HH	5.5	*	*	94.5	*	*	100.0

Improved cooking fuel= electricity, gas, kerosene and solar.
*Data not available.
Sources: Compiled from [1] Statistics Sierra Leone, 2004 Population and Housing Census. Analytical Report on Poverty. [2] Central Statistics Office, The Analytical Report, 1985 Population and Housing Census of Sierra Leone. [3] Statistics Sierra Leone, 2015 Population and Housing Census

13.4.3.4 Access to improved floor

Flooring material and access to electricity are proxies for the quality of housing in the poverty index (Santos & Alkire, 2011). Flooring material made of dirt, sand or dung is considered as deprivation in flooring. In the current context, households are not deprived if the floor is made of stone, or tiles or wood.

The data show a sharp decline of 16 per cent of deprived households in this indicator from 62.9 per cent in 2004 to 46.9 per cent in 2015 (Table 13.8). In 2015, the Western Region had less than six per cent of its households deprived in flooring compared to about 60 per cent for each of the other three regions. Rural households are worse off in improved flooring compared to urban households; in 2015, 5.7 per cent of urban households were deprived in improved flooring compared to 41.3 per cent for rural households.

Similar deprivation percentages of 2.7, 4.8, 5.4 and 9.7 are observed for urban areas in Southern, Western, Northern and Eastern regions respectively. The deprivation rates in rural areas are over 50 per cent for Eastern, Northern and Southern regions, whilst it is 0.9 per cent in the Western Region.

Table 13.8 Households' deprivation status in access to improved floor by region and place of residence

Region		Household access to improved floor Deprivation status						Total No. of households
		Not deprived			Deprived			
		Total	Urban	Rural	Total	Urban	Rural	
Eastern	No. of HH	109,542	71,269	38,273	171,659	27,295	144,364	281,201
	% of Total HH	39.0	25.3	13.6	61.0	9.7	51.3	100.0
Northern	No. of HH	162,685	85,133	77,552	251,692	22,270	229,422	414,377
	% of Total HH	39.3	20.5	18.7	60.7	5.4	55.4	100.0
Southern	No. of HH	96,581	42,757	53,824	152,074	6,673	145,401	248,655
	% of Total HH	38.8	17.2	21.6	61.2	2.7	58.5	100.0
Western	No. of HH	302,725	296,793	5,932	18,510	15,544	2,966	321,235
	% of Total HH	94.2	92.4	1.8	5.8	4.8	0.9	100.0
All Regions 2015	No. of HH	671,533	495,952	175,581	593,35	71,782	522,153	1,265,468
	% of Total HH	53.1	39.2	13.9	46.9	5.7	41.3	100.0

Improved floor = stone, tiles, cement and wood.
*Data not available.
Sources: Compiled from [1] Statistics Sierra Leone, 2004 Population and Housing Census. Analytical Report on Poverty. [2] Central Statistics Office, The Analytical Report, 1985 Population and Housing Census of Sierra Leone. [3] Statistics Sierra Leone, 2015 Population and Housing Census

13.4.3.5 Access to electricity

In 2015, 82 per cent of households in the country were deprived in access to electricity (Table 13.9). This is an improvement over the 94.8 per cent in 2004 and 90.9 per cent in 1985.

Eastern, Northern and Southern regions all had more than 90 per cent of their households deprived in electricity access, while the Western Region had 48.3 per cent of households deprived.

Rural urban differentials once more exist in access to electricity. The proportion of households deprived in access to electricity in urban areas (27.4 per cent) is half of the proportion deprived in rural areas (54.7 per cent).

These differentials are more pervasive in the regions. The Southern Region has the largest difference (14 per cent urban and 79.7 per cent rural), followed by the Northern Region (20.1 per cent urban and 73.3 per cent rural) and the Eastern Region (29.3 per cent urban and 64.8 per cent rural). It is only in the Western Region that the percentage of deprived households is higher in urban areas (45.6 per cent) than in rural areas (2.8 per cent).

Table 13.9 Households' electricity access deprivation status by region and place of residence

Region		Not deprived			Deprived			Total No. of households
		Total	Urban	Rural	Total	Urban	Rural	
Eastern	No. of HH	16,546	16,088	458	264,655	82,476	182,179	281,201
	% of Total HH	5.9	5.7	0.2	94.1	29.3	64.8	100.0
Northern	No. of HH	27,448	24,057	3,391	386,929	83,346	303,583	414,377
	% of Total HH	6.6	5.8	0.8	93.4	20.1	73.3	100.0
Southern	No. of HH	15,615	14,591	1,024	233,040	34,839	198,201	248,655
	% of Total HH	6.3	5.9	0.4	93.7	14.0	79.7	100.0
Western	No. of HH	165,942	165,911	31	155,293	146,426	8,867	321,235
	% of Total HH	51.7	51.6	0.0	48.3	45.6	2.8	100.0
All Regions 2015	No. of HH	225,551	220,647	4,904	1,039,917	347,087	692,830	1,265,468
	% of Total HH	17.8	17.4	0.4	82.2	27.4	54.7	100.0
All Regions 2004	No. of HH	*	*	*	*	*	*	819,484
	% of Total HH	5.2^	*	*	*	94.8	*	100.0
All Regions 1985	No. of HH	*	*	*	*	*	*	475,060
	% of Total HH	9.1	*	*	*	90.9	*	100.0

*Data not available

^Includes electricity from generator

Sources: Compiled from [1] Statistics Sierra Leone, 2004 Population and Housing Census. Analytical Report on Poverty. [2] Central Statistics Office, The Analytical Report, 1985 Population and Housing Census of Sierra Leone. [3] Statistics Sierra Leone, 2015 Population and Housing Census.

The five housing indicators of standard of living showed that the Western Region has the lowest percentage of deprived households in four of these indicators, namely, clean drinking water, improved cooking fuel, improved floor, and electricity.

The Northern Region has the smallest percentage of deprived households in sanitation and the highest in cleaning drinking water. The Southern Region is the worst for improved floor, while the Eastern Region is the most deprived in three indicators – sanitation, improved cooking fuel and electricity.

The Western Region is thus the least deprived with respect to housing poverty and the Eastern Region is the most deprived. These findings for the Western Region are consistent with reports by SSL (2006) that the Western Region is rich in terms of housing.

However, this same report found the Northern not the Eastern Region to be the most deprived in terms of housing poverty.

13.4.4 Assets

Ownership of household goods is a very good proxy for a household's socioeconomic status. Data on ownership of durable goods were collected for the first time in the 2004 Census. There were 11 items, namely, electric iron, refrigerator, television, computer, radio, telephone, cell phone, modern stove, bicycle, motor cycle and car/truck. For the 2015 Census, the list of durable goods was increased to 16, adding charcoal iron, generator, bed, sofa and boat. Car/truck was also separated out and considered as two items. Refrigerator was combined with freezer and telephone (landline) was dropped, leaving only mobile phone.

The discussion on the deprivation of status of households with respect to durable assets is preceded by a description of household assets by characteristics of dwelling unit (region and place of residence, type of dwelling unit) as well as characteristics of the head of household (sex, age, education, marital status, economic activity status and main employment status). It has not been possible to obtain data on the ownership of individual household items for the 2004 Census data. Such data are however available for the 2008 and 2013 SLDHS (SSL & ICF, 2009 & 2014). That list has 10 items (car and truck considered a single item) but excludes charcoal iron, electric iron, generator, computer, bed, sofa and modern stove. Even though the data from the SLDHS was collected on a sample basis, it was a nationally representative sample and hence could facilitate comparison with the current data where necessary.

Some data on asset-based poverty are also published in the SL-PRSP I (ownership of consumer durables by quintiles) and SL-PRSR II (percentage of households owning certain durable assets in 2007). The tables on ownership of household durable goods show the percentages of households that own each of the 16 items. These are mutually exclusive and hence do not add up to 100 per cent.

According to the SL-PRSP II (RoSL), the incidence of national asset-based poverty declined from 67.5 per cent in 2003 to 61.6 per cent in 2007. In rural areas the decline was marginal, from 78.6 per cent to 77.1 per cent; while in urban areas the decline was from 47.3 in 2003 to 35.4 per cent in 2007.

13.4.4.1 Ownership of household assets by region and place of residence

The most common goods owned by households in Sierra Leone are a bed (81.2 per cent), radio (65.9 per cent) and mobile phone (62.9 per cent) (Table 13.10). Fewer households own a charcoal iron (29.7 per cent) and television (19.8 per cent). A sofa (14.6 per cent) and fridge/freezer (10.3 per cent) have lower ownership rates.

For mobility goods, motorcycles come out top with 7.6 per cent ownership followed by bicycle (6.4 per cent), car (3.7 per cent), boat (2.4 per cent) and truck (0.6 per cent).

Ownership of non-information electrical goods such as fridge/freezer (10.3 per cent), generator (8.2 per cent) and electric iron (5.5 per cent) show no discernible patterns.

The national pattern of the top four leading goods – bed, radio, mobile phone and charcoal iron – is replicated across all regions. However, in the Western Region ownership of mobile phone (89.9 per cent) tops the list and also a higher proportion of households own a bed, radio and charcoal iron compared to the other three regions.

Indeed in this region, apart from less than 10 per cent ownership of mobility goods, ownership of all other goods exceeds 15 per cent. The Western Region also has the highest ownership rates for all goods except bicycle, motorcycle, truck and boat.

Motorcycle and bicycle ownership are the leaders in the Eastern (8.0 and 5.1 per cent respectively) and Northern (8.7 and 7.4 per cent respectively) regions, motorcycle and boat (6.9 and 6.3 per cent respectively) are most common in the Southern Region and car and bicycle (9.7 and 7.1 per cent respectively) are most popular in the Western Region. Ownership of a boat is highest in the Southern Region (6.3 per cent) and lowest in the Eastern Region (0.6 per cent).

Ownership of durable goods shows differentials by place of residence and the type of the asset. With the exception of a boat, which has a higher ownership rate among rural households (3.4 per cent compared to 1.2 per cent for urban), all other assets have higher ownership rates for urban households.

The disparities by place of residence are more pronounced for most of the electronic goods. For example, 11. 7 per cent of urban households own an electric iron, compared with 0.4 per cent of rural households. Similarly, 22 per cent of urban households own a fridge/ freezer compared to 0.8 per cent of rural households.

These large rural-urban differentials in ownership of electrical goods were also noted in the SLDHS (SSL & ICF 2014, 2009) and also in the SL-PRSP II. Although rural-urban differences also persist in ownership of radio (54.4 and 80.2 per cent respectively) and mobile phones (43.3 and 86.9 per cent respectively), the variations are less pronounced.

Variations by place of residence for mobility goods are not as marked as some of those noted above. As noted earlier, urban households have higher ownership rates for all mobility goods except a boat. The proportions of households owning a bicycle and motorcycle in urban areas is twice that in rural areas, while the likelihood of urban households owning a car or truck is 10 times that of rural households.

This large variation in ownership proportions for car or truck between rural and urban areas is actually a decline from the 2007 level when urban households were 14 times more likely to own a car or truck (SL-PRSP II).

Table 13.10 Percentage of households owning durable goods by region and residence

Durable goods		Region				Residence	
	Total country	Northern	Southern	Eastern	Western	Rural	Urban
No. of households	1,265,468	281,201	414,377	248,655	321,235	697,734	567,734
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electric iron	5.5	1.0	1.8	1.8	17.0	0.4	11,7
Charcoal iron	29.7	22.4	20.3	19.8	55.8	11.1	52.5
Generator	8.2	4.5	4.2	5.8	18.5	2.4	15.3
Fridge/ freezer	10.3	2.8	3.7	4.0	30.4	0.8	22.0
TV	19.8	7.5	8.1	8.9	53.9	2.6	40.9
Computer	5.8	2.4	2.7	2.9	15.1	1.0	11.7
Radio	66.0	65.8	58.5	60.6	79.9	54.4	80.2
Mobile phone	62.9	56.3	52.4	53.3	89.9	43.4	86.9
Modern stove	6.3	3.2	3.2	3.2	15.4	2.0	11.6
Bed	81.2	82.1	74.3	84.6	86.6	76.2	87.3
Sofa	14.6	14.1	6.5	10.8	28.3	8.9	21.6
Bicycle	6.4	5.1	7.4	5.5	7.1	4.6	8.7
Motorcycle	7.6	8.0	8.7	6.9	6.5	5.4	10.3
Car	3.7	1.4	1.7	1.7	9.7	0.7	7.3
Truck	0.6	0.3	0.4	0.4	1.3	02	1.1
Boat	2.4	0.6	2.2	6.3	1.3	3.4	1.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

13.4.4.2 Ownership of household goods by characteristics of dwelling units

The ownership pattern of the top four goods (bed, radio, mobile phone and charcoal iron) varies according to the type of dwelling units (Table 3.11). For households in improvised homes, the top four goods are mobile phone (85.2 per cent), bed (80.5 per cent), radio (74.3 per cent), charcoal iron (42.7 per cent). Ownership of mobile phone has the highest proportion.

Ownership of mobility goods among households in different types of dwelling units also follows the same pattern observed in the entire country, namely, motorcycle, bicycle, car, boat and truck. The pattern for households in huts/buildings in different compounds does not conform to the national pattern. For this group, a boat is the most popular, followed by motorcycle, bicycle, car and truck.

Households living in compound houses have the highest ownership rates for 11 out of 16 goods, the exceptions being mobile phone, radio, television (households in improvised homes have the highest rates for these three goods), truck (highest rate of 1.1 per cent by other category) and boat.

Households living in huts/buildings in different compounds have the lowest ownership rate in all but two goods – sofa and boat. These households have the highest ownership rate (4.6 per cent) for boat. Even though their ownership rates for bed (68.2 per cent), radio (44.9 per cent) and mobile phone (33.4 per cent) are the lowest, the rates show that a reasonable percentage of households own these items.

Table 13.11 Percentage of households owning durable goods by type of dwelling unit

Durable goods		Type of dwelling unit				
	Total country	Separate house	Semi-detached house	Flat/ Apartment	Compound house (rooms)	Huts/ Buildings (same compound)
No. of HH	1,265,468	685,348	89,124	261,181	131,072	30,758
Total	100	100	100	100	100	100
Electric Iron	5.5	3.2	8.1	8.8	9.6	5.1
Charcoal Iron	29.7	23	39.9	38.2	43.2	24.4
Generator	8.2	6.2	10.5	11.5	12	6.2
Fridge/ Freezer	10.3	5.9	16.1	16.1	18.4	9.5
TV	19.8	11.5	32.1	29.6	35	18
Computer	5.8	3.8	7.9	8.6	9.7	5.2
Radio	66	62.3	72.1	71.6	73.3	58.7
Mobile Phone	62.9	55.8	74.1	71.5	77.4	54.6
Modern Stove	6.3	4.5	8.3	8.8	10	5.3
Bed	81.2	80	83.3	83.6	85.5	75.5
Sofa	14.6	12.1	17.3	18.6	19.4	12.9
Bicycle	6.4	6	7.1	7.4	7.7	5.4
Motorcycle	7.6	7.2	8.2	8.4	9	6.9
Car	3.7	2.5	4.5	5.4	6.2	3.1
Truck	0.6	0.4	0.7	0.8	1	0.6

Table 13.11 Percentage of households owning durable goods by type of dwelling unit (continued)

Durable goods	Type of dwelling unit				
	Huts/ Buildings (different compound)	Tent	Improvised home (kiosk container board pan-body)	Uncompleted building	Other
No. of HH	18,031	10,025	27,578	9,467	2,884
Total	100	100	100	100	100
Electric Iron	0.7	2.3	7.1	5.5	5.9
Charcoal Iron	6.7	20.4	42.7	31.4	26.5
Generator	1.6	5	10.6	9.6	9
Fridge/ Freezer	1.3	4.5	16.8	9.7	9.6
TV	2.7	9.5	38.2	18.6	16.5
Computer	1	3.4	6.9	6.2	6.2
Radio	44.9	55.4	74.3	66.5	64.7
Mobile Phone	33.4	49.8	85.2	69.3	62.4
Modern Stove	1.7	4.3	8.7	7	6.6
Bed	68.2	72.7	80.5	75.9	77.8
Sofa	7.9	7	16.2	12.4	13.2
Bicycle	3.4	5.8	4.3	5.4	6.7
Motorcycle	4.1	8	5.8	6.6	6.4
Car	0.6	2	3.1	4	4.1
Truck	0.2	0.5	0.5	0.8	1.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

13.4.4.3 Ownership of household goods by sex of head and place of residence

The ownership of household durable goods by sex of household head and place of residence are presented in Table 13.12. Male-headed households have higher ownership rates of all durable goods except refrigerator/freezer where the rate is slightly higher for females (by 0.2 per cent).

A similar situation prevailed in 2007. Out of seven household assets (home, land, car/truck, fan, refrigerator, cell phone and radio), male-headed households had higher percentages owning all goods, except for refrigerator where the percentage for females, was higher than 0.3 percent higher (SL – PRSP II). This higher ownership rate for females may be because women are more aware of the benefits a refrigerator brings to food storage.

Ownership of goods by sex of head shows patterns similar to the national. The five most common goods are the same for each sex. Five goods (electric iron, charcoal iron, fridge/ freezer, modern stove and sofa) show slight differences.

For all the remaining 11 goods, differences between male and female-headed households are more pronounced; for example, radio (males 69.3 per cent; females 56.1 per cent) and mobile phone (males 65.8 per cent; females 55.7 per cent), for motorcycle (male 9 per cent, female 4.1 per cent) and boat (male 2.8 per cent, female 1.4 per cent).

Comparisons by sex of head of household and place of residence still favour males in both places. The differences in this case are more accentuated in rural areas. This suggests that male-headed rural households are better off than female-headed rural households.

Table 13.12 Percentage of households owning durables by place of residence and sex of head of household

	Both Sexes			Male Head			Female Head		
Durable good/ ownership status	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
No. of households	1,265,468	697,734	567,734	909,535	504,818	404,717	355,933	192,916	163,017
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electric iron	5.5	0.4	11.7	5.6	0.4	12.0	5.2	0.3	11.1
Charcoal iron	29.7	11.1	52.5	29.8	11.8	52.3	29.4	9.4	53.1
Generator	8.2	2.4	15.3	9.0	2.7	16.8	6.3	1.6	11.8
Refrigerator/ freezer	10.3	0.8	22.0	10.2	0.8	22.0	10.6	0.8	22.1
Television	19.8	2.6	40.9	20.5	2.8	42.7	17.8	1.9	36.6
Computer	5.8	1.0	11.7	6.3	1.1	12.7	4.6	0.7	9.1
Radio	66.0	54.4	80.2	69.8	59.4	82.8	56.1	41.4	73.5
Mobile phone	62.9	43.4	86.9	65.8	47.4	88.8	55.7	33.0	82.4
Modern stove	6.3	2.0	11.6	6.4	2.1	11.8	6.0	1.9	10.9
Bed	81.2	76.2	87.3	81.9	77.4	87.6	79.3	73.1	86.6
Sofa	14.6	8.9	21.6	14.8	9.1	21.9	14.0	8.4	20.7
Bicycle	6.4	4.6	8.7	7.0	5.2	9.2	5.0	2.7	7.6
Motorcycle	7.6	5.4	10.3	9.0	6.4	12.2	4.1	2.7	5.6
Car	3.7	0.7	7.3	4.1	0.8	8.2	2.5	0.4	5.1
Truck	0.6	0.2	1.1	0.7	0.2	1.2	0.4	0.1	0.7
Boat	2.4	3.4	1.2	2.8	3.9	1.4	1.4	2.0	0.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

13.4.4.4 Ownership of household assets by age of head

Household heads aged 55 to 59 have the highest ownership rates for 10 out the 16 goods (Table 13.13). The exceptions are television, computer, mobile phone, modern stove, motorcycle and boat; where they are placed between second and sixth. The ownership rates for these items were all above the national average except for mobile phone which was lower than the national average.

Households with heads aged 75 years and over have the lowest ownership in 12 out of the 16 goods, the only exceptions being bed, sofa, car and boat. For bed, they are only better off than the youngest age group, for sofa and car they are better off than the three youngest age groups.

Household with heads aged 70 to 74 are just a little better off than their older counterparts. In their case they are second to last in ten items, with the same exceptions as before, in addition to freezer and truck. The proportions of households with heads age 70 to 74 owning these items are higher for this age group than for the four youngest age groups.

There appears to be a trend where ownership rates for certain types of goods are higher among younger, middle or older age groups. For example, households with young heads have higher ownership rates in electronic goods. Those with heads aged 25-29 and 30-34 have the highest ownership rates for computer (6.8 and 7 per cent respectively) and heads aged 20-24 and 25-29 have the highest ownership rates for mobile phone (70.9 and 70.2 percent respectively).

Ownership rates for motorcycle are higher among heads aged 25-29 to 45-49, stove and bed (30-34 to 55-59), sofa (30-34 to 65-69), bicycle (35-39 to 55-59), car (35-39 to 65-69), truck (40-44 to 65-60) and boat (40-44 to 75+).

Table 13.13 Percentage of households owning durable goods by age of head

		Age group of head of household						
Household durable goods	Total country	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49
No. of HH	1,265,68	15,291	62,681	138,726	148,416	191,384	156,927	146,621
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electric iron	5.5	3.4	4.1	4.9	6.3	5.9	6.2	5.5
Charcoal iron	29.7	30.0	28.3	27.7	28.4	28.6	30.8	31.2
Generator	8.2	8.3	7.1	7.3	8.4	8.5	9.1	8.8
Fridge/ freezer	10.3	6.7	6.9	8.6	11.6	11.1	11.7	10.7
Television	19.8	15.6	20.0	22.7	24.2	21.3	20.9	18.8
Computer	5.8	4.7	6.2	6.8	7.0	5.9	5.9	5.6
Radio	66.0	60.2	64.7	66.8	67.2	67.5	67.5	68.2
Mobile phone	62.9	63.8	70.9	70.2	67.3	65.7	63.8	63.1
Modern stove	6.3	5.1	5.5	6.1	7.0	6.6	6.8	6.3
Bed	81.2	75.1	78.1	80.2	81.6	81.7	81.9	82.3
Sofa	14.6	10.3	11.0	12.2	14.7	14.9	15.4	15.1
Bicycle	6.4	6.8	5.7	5.5	6.0	6.6	7.2	7.1
Motorcycle	7.6	5.9	7.3	8.6	8.5	8.4	8.2	8.0
Car	3.7	2.0	2.0	2.4	3.6	3.8	4.3	4.1
Truck	0.6	0.4	0.4	0.4	0.5	0.6	0.7	0.7
Boat	2.4	1.4	1.6	2.0	2.2	2.3	2.6	2.7

Table 13.13 Percentage of households owning durable goods by age of head (continued)

		Age group of head of household					
Household durable goods	Total country	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 +
No. of HH	1,265,68	115,692	72,545	69,521	47,699	39,269	60 696
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electric iron	5.5	6.0	6.6	5.2	5.4	4.1	3.0
Charcoal iron	29.7	32.6	35.4	30.2	32.0	25.9	23.0
Generator	8.2	8.9	9.8	7.9	8.2	6.2	5.0
Fridge/ freezer	10.3	11.2	12.4	10.1	10.6	8.1	6.4
Television	19.8	19.0	20.1	15.9	16.5	12.6	10.2
Computer	5.8	5.9	6.3	4.9	5.0	3.7	2.8
Radio	66.0	66.7	68.0	62.7	63.9	58.4	55.8
Mobile phone	62.9	60.8	62.5	55.0	56.0	49.0	44.2
Modern stove	6.3	6.6	6.9	5.9	5.9	4.8	4.2
Bed	81.2	82.1	82.9	80.7	81.6	79.4	78.0
Sofa	14.6	15.8	16.7	15.5	16.1	13.7	13.1
Bicycle	6.4	7.1	7.3	6.3	6.4	5.4	4.7
Motorcycle	7.6	7.3	7.7	6.2	6.1	4.8	4.1
Car	3.7	4.3	4.9	4.1	4.4	3.1	2.4
Truck	0.6	0.7	0.8	0.7	0.7	0.5	0.4
Boat	2.4	2.7	2.6	2.7	2.5	2.7	2.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

13.4.4.5 Ownership of household goods by marital status of head

Ownership of household durable goods by marital status of head is presented in Table 13.14. The data show that household with heads who have never married have the highest ownership rates in all but five goods (bed, bicycle, motorcycle, truck and boat). Households with heads who are engaged are placed second in all but three goods, namely bed (first), car and truck (third).

Households where the head is widowed have the lowest ownership percentages for all goods.

Household with heads who are married and in monogamous unions also have higher ownership rates than those in polygamous unions in all but five goods (mobile phone, bed, bicycle, motor and boat).

Heads of households who are cohabiting have higher ownership rates for most items than those who are married. The latter have a higher advantage with mobility goods. Households whose heads are divorced also have higher ownership rates in 11 items than those who are separated.

Table 13.14 Percentage of households owning durable goods by marital status of head

		Marital status of head of household				
Household durable goods	Total country	Never married	Engaged	Married monog-amous	Married polygamous	Co-habitation (< 5 years)
No. of HH	1,265 468	112,187	70,862	174,382	744,678	3,192
Total	100.0	100.0	100.0	100.0	100.0	100.0
Electric iron	5.5	12.2	7.1	6.3	4.3	7.6
Charcoal iron	29.7	41.4	37.7	30.6	27.2	35.7
Generator	8.2	11.5	10.7	8.8	7.9	8.9
Fridge/ freezer	10.3	18.1	14.7	11.3	8.7	11.9
Television	19.8	37.9	31.8	19.2	16.7	26.5
Computer	5.8	13.0	7.7	6.4	4.7	7.8
Radio	66.0	73.1	72.7	63.2	67.2	65.2
Mobile phone	62.9	81.8	76.2	60.3	61.5	73.2
Modern stove	6.3	11.4	8.5	7.0	5.3	7.9
Bed	81.2	82.0	82.1	80.3	81.7	81.5
Sofa	14.6	18.7	17.6	14.6	13.6	14.8
Bicycle	6.4	6.1	6.3	6.1	7.0	6.0
Motorcycle	7.6	7.5	8.1	6.5	8.7	7.0
Car	3.7	5.0	4.0	4.4	3.5	3.8
Truck	0.6	0.7	0.6	0.7	0.6	0.5
Boat	2.4	0.9	1.9	1.7	3.1	1.1

Table 13.14 Percentage of households owning durable goods by marital status of head (continued)

		Marital status of head of household				
Household durable goods	Total country	Co-habitation (= >5 years)	Separated	Divorced	Widowed	Don't know
No. of HH	1,265 468	2,044	30,954	19,623	106,728	818
Total	100.0	100.0	100.0	100.0	100.0	100.0
Electric iron	5.5	7.6	5.9	7.2	3.8	7.8
Charcoal iron	29.7	36.9	32.1	33.5	25.9	33.9
Generator	8.2	7.8	6.8	7.9	5.1	7.1
Fridge/ freezer	10.3	13.8	11.2	12.5	8.5	10.8
Television	19.8	28.7	21.5	21.9	13.9	22.7
Computer	5.8	7.4	5.3	6.2	3.4	5.9
Radio	66.0	64.9	63.3	63.2	50.7	64.5
Mobile phone	62.9	71.7	63.1	61.8	48.1	65.6
Modern stove	6.3	8.1	7.1	7.9	4.7	8.2
Bed	81.2	78.3	80.8	79.5	78.0	74.9
Sofa	14.6	19.2	15.9	16.6	14.1	13.7
Bicycle	6.4	5.8	4.7	5.3	4.2	4.6
Motorcycle	7.6	5.9	4.2	4.3	3.2	3.5
Car	3.7	3.0	2.7	3.7	2.0	3.5
Truck	0.6	0.4	0.5	0.7	0.3	1.3
Boat	2.4	1.4	1.5	1.5	1.1	1.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

13.4.4.6 Ownership of household goods by level of education of head

Ownership of household goods classified by education (highest level attained) of household head is presented in Table 13.15. As expected, households with heads who have tertiary and higher education top the list for ownership of all durable goods except boat; achieving over 90 per cent ownership for radio, mobile phone and bed. Apart from boat, where their ownership rate is below the national average, they are well above average for all goods.

Households whose heads have no education and those with Koranic education own the least durable goods. However, household heads with Koranic education have the highest ownership rate (5.2 per cent) for boats. Households whose heads have only kindergarten education have higher ownership rates than households whose heads have primary and JSS. This may be due to the fact that those with kindergarten education may have been working for longer periods of time.

Household heads with vocational, technical, nursing and teacher training educational backgrounds do better than those with SSS and they in turn do better than all the educational levels below them.

World Bank (2014) and World Bank and SSL (WB & SSL 2014) also noted that higher levels of education of head of household were strongly associated with higher consumption and lower poverty.

Table 13.15 Percentage of households owning durable goods by highest education level of head

		Highest education level of head of household				
Household durable goods	Total country	No Education	Kinder-garten	Primary	Junior secondary	Senior secondary
No. of HH	1,265 468	717,782	17,638	106,856	121,735	167,969
Total	100.0	100.0	100.0	100.0	100.0	100.0
Electric iron	5.5	1.2	9.6	3.6	4.8	11.1
Charcoal iron	29.7	17.4	41.0	30.0	36.6	51.9
Generator	8.2	3.0	13.1	7.8	9.7	15.4
Fridge/ freezer	10.3	3.2	17.3	8.9	11.7	21.2
Television	19.8	7.8	29.4	19.6	25.8	41.3
Computer	5.8	1.4	9.0	3.5	4.2	10.4
Radio	66.0	56.6	73.9	68.9	73.9	82.3
Mobile phone	62.9	48.7	73.9	68.6	77.2	88.8
Modern stove	6.3	3.0	10.0	5.3	6.4	10.7
Bed	81.2	76.9	83.5	82.7	84.0	88.1
Sofa	14.6	9.8	20.4	13.7	15.2	21.4
Bicycle	6.4	4.3	8.6	6.7	7.2	9.2
Motorcycle	7.6	4.7	10.0	7.6	9.3	12.1
Car	3.7	1.1	6.2	2.8	3.4	6.0
Truck	0.6	0.3	1.2	0.6	0.7	0.9
Boat	2.4	2.9	2.3	2.4	1.7	1.2

Table 13.15 Percentage of households owning durable goods by highest education level of head (continued)

Household durable goods	Highest education level of head of household					
	Voc /Tech/ Nursing/ Teacher training	Higher (First Degree)	Tertiary (Post-graduate & Ph.D	Koranic	Other	Don't Know
No. of HH	58,085	33,487	13,063	24,473	3,397	983
Total	100.0	100.0	100.0	100.0	100.0	100.0
Electric iron	16.9	40.9	48.0	1.6	18.5	11.7
Charcoal iron	65.1	72.1	73.1	24.2	55.3	53.0
Generator	21.8	37.9	47.5	5.1	21.4	16.5
Fridge/ freezer	28.4	54.1	61.7	4.4	31.3	27.0
Television	48.3	73.3	75.4	10.7	47.8	45.9
Computer	19.6	46.4	53.3	2.2	16.5	10.7
Radio	88.5	89.8	90.6	67.7	81.4	77.1
Mobile phone	92.5	96.2	95.9	63.5	84.0	82.5
Modern stove	15.0	30.3	39.0	3.7	16.2	10.7
Bed	91.4	93.9	94.6	84.4	88.1	88.9
Sofa	26.5	45.3	52.1	10.7	28.0	23.2
Bicycle	12.8	15.5	18.7	7.1	9.9	8.2
Motorcycle	17.2	17.6	17.5	9.3	10.7	7.8
Car	8.6	26.9	39.2	2.1	13.0	9.5
Truck	1.1	2.8	4.2	0.5	2.0	1.8
Boat	1.1	1.4	1.6	5.3	1.6	1.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

13.4.4.7 Ownership of household durable goods by economic activity status of head

Generally, households with heads who are employed have the lowest ownership rates of goods while households with heads who are unemployed have the highest ownership rates (apart from motorcycle, car, truck and boat) (Table 13.16). Households with heads who are employed have the highest ownership rates for motorcycle and boat while households with heads who are not in the labour force dominate ownership of car and truck.

Table 13.16 Percentage of households owning durable goods by economic activity

		Economic activity status of head of household		
Household durable goods	Total country	Employed	Unemployed	Not in labour force
No. of HH	1,265,468	1,051,315	38,766	175,387
Total	100.0	100.0	100.0	100.0
Electric iron	5.5	5.1	7.3	7.2
Charcoal iron	29.7	27.7	44.0	38.6
Generator	8.2	7.9	11.0	9.6
Fridge/ freezer	10.3	9.6	14.9	13.6
Television	19.8	18.5	32.4	24.8
Computer	5.8	5.4	8.2	7.4
Radio	66.0	65.5	75.2	66.9
Mobile phone	62.9	61.3	82.3	68.6
Modern stove	6.3	6.0	8.9	7.4
Bed	81.2	81.0	82.0	81.7
Sofa	14.6	14.3	16.3	16.0
Bicycle	6.4	6.3	7.0	6.9
Motorcycle	7.6	7.8	7.6	6.3
Car	3.7	3.6	3.9	4.0
Truck	0.6	0.6	0.6	0.6
Boat	2.4	2.6	1.0	1.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Ownership of durable goods classified by main employment status of head of household is also examined. There are 12 categories for employment status (see Table 13.17). Households with heads who are pensioners are leaders in ownership of durable goods (except access to information goods, bed and motorcycle, where paid employees fare better). They are followed by households who heads are paid employees and those whose heads are persons who have worked before but currently looking for work. Households with heads who are unpaid apprentice, self-employed without employees and unpaid family worker are the least endowed. It is surprising to note that households with heads who are unpaid apprentices have higher ownership rates in nine items than the households with heads who are self-employed without employees.

Table 13.17 Percentage of households owning durables goods by main employment status of headstatus of head

		Main employment status of household head				
Household durable goods	Total country	Paid employee	Self-employed without employees	Self-employed with employees (employer)	Unpaid family worker	Paid apprentice
No. of HH	1,265,468	1,051,315	38,766	175,387	31.683	5,837
Total	100.0	100.0	100.0	100.0	100.0	100.0
Electric iron	5.5	5.1	7.3	7.2	1.1	5.6
Charcoal iron	29.7	27.7	44.0	38.6	14.0	35.6
Generator	8.2	7.9	11.0	9.6	2.9	10.5
Fridge/ freezer	10.3	9.6	14.9	13.6	2.4	11.3
Television	19.8	18.5	32.4	24.8	5.4	28.1
Computer	5.8	5.4	8.2	7.4	1.5	6.0
Radio	66.0	65.5	75.2	66.9	54.9	73.5
Mobile phone	62.9	61.3	82.3	68.6	45.2	81.0
Modern stove	6.3	6.0	8.9	7.4	2.4	7.8
Bed	81.2	81.0	82.0	81.7	77.0	81.2
Sofa	14.6	14.3	16.3	16.0	10.9	14.0
Bicycle	6.4	6.3	7.0	6.9	4.4	6.5
Motorcycle	7.6	7.8	7.6	6.3	4.6	8.2
Car	3.7	3.6	3.9	4.0	1.0	4.4
Truck	0.6	0.6	0.6	0.6	0.3	1.2
Boat	2.4	2.6	1.0	1.4	2.1	1.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 13.17 Percentage of households owning durables goods by main employment status of headstatus of head (continued)

Household durable goods	Main employment status of household head					
	Unpaid apprentice	Worked before but currently looking for work	Looking for work for the first time	Household work	Not working & not looking for work	Full time student
No. of HH	8,012	11,660	27,106	49,917	51,514	38,112
Total	100.0	100.0	100.0	100.0	100.0	100.0
Electric iron	2.3	10.2	6.1	3.9	4.9	9.6
Charcoal iron	23.6	51.9	40.6	31.3	33.5	47.2
Generator	6.3	14.3	9.6	6.8	7.4	11.5
Fridge/ freezer	4.9	20.1	12.7	9.5	10.8	14.7
Television	13.7	40.2	29.1	17.9	20.3	31.2
Computer	2.7	9.8	7.5	3.8	4.6	13.8
Radio	63.5	79.4	73.3	61.0	62.7	75.2
Mobile phone	64.6	86.0	80.6	60.8	61.6	84.1
Modern stove	4.8	11.3	7.8	5.4	5.8	8.8
Bed	74.2	85.6	80.4	79.6	80.6	83.2
Sofa	11.9	21.0	14.3	13.3	13.9	16.4
Bicycle	5.0	8.2	6.5	5.9	5.6	9.3
Motorcycle	5.5	8.2	7.4	5.0	5.2	8.8
Car	1.4	5.5	3.2	2.6	3.0	3.9
Truck	0.5	0.6	0.6	0.5	0.5	0.6
Boat	2.5	0.8	1.1	1.8	1.7	0.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 13.17 Percentage of households owning durables goods by main employment status of headstatus of head (continued)

	Main employment status of household head		
Household durable goods	Retired/ pensioner	Other (specify)	Don't know
No. of HH	15,899	16,230	3,715
Total	100.0	100.0	100.0
Electric iron	20.0	6.2	5.9
Charcoal iron	61.4	35.1	37.1
Generator	22.7	8.8	8.0
Fridge/ freezer	33.8	12.9	11.7
Television	45.4	25.4	24.1
Computer	14.7	5.6	5.8
Radio	80.1	65.9	65.7
Mobile phone	78.6	69.6	64.3
Modern stove	16.5	6.5	6.9
Bed	89.2	81.6	78.1
Sofa	32.1	14.9	15.5
Bicycle	9.8	5.7	6.3
Motorcycle	7.8	6.3	5.4
Car	12.8	3.6	3.3
Truck	1.7	0.6	0.5
Boat	1.4	1.0	1.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

13.4.5 Asset Poverty

The deprivation status of households with respect to assets, has been classified into three groups namely, information goods, mobility goods and livelihood goods. The goods included in the classification are limited to those used in the UNDP MPI and not the entire list discussed in the household durable goods section above. Information goods are: radio, television and mobile phone; mobility goods are: bicycle, motorbike, car, truck and boat; while livelihood goods are refrigerator/freezer, and livestock.

13.4.5.1 Information goods

One in four households are deprived with regard to access to information goods in the country, with variations by region (Table 13.18). The Western Region has the lowest rate of deprivation (5.4 per cent), followed by Eastern (25.7 per cent), Southern (30.3 per cent) and Northern (32.4 per cent) regions.

There are also obvious disparities by place of residence, with rural households worse off. While 20.5 per cent of households are deprived in rural areas, only 3.2 per cent are deprived among urban households. The Southern Region recorded the lowest (1.2 per cent) and Western Region (4.8 per cent) the highest percentage in urban areas.

The percentage of households deprived of access to information goods in rural areas ranges from a low of 0.6 per cent in the Western Region, to a high of 29.6 per cent in the Northern Region.

There is also intra-region variation by place of residence. Percentages of deprived households in rural areas are six times that in urban areas in the Eastern Region, 11 times the rate in urban areas in the Northern Region and 24 times the urban rate in Southern Region. The Western Region has lower proportions deprived in rural compared to urban areas. The gap in rural urban differentials has been observed by the World Bank (2014).

Table 13.18 Households' deprivation status in access to information goods by region and place of residence

Region		Not deprived			Deprived			Total No. of households
		Total	Urban	Rural	Total	Urban	Rural	
Eastern	No. of HH	209,031	88,513	120,518	72,170	10,051	62,119	281,201
	% of Total HH	74.3	31.5	42.9	25.7	3.6	22.1	100.0
Northern	No. of HH	280,252	95,737	184,515	134,125	11,666	122,459	414,377
	% of Total HH	67.6	23.1	44.5	32.4	2.8	29.6	100.0
Southern	No. of HH	173,340	46,390	126,950	75,315	3,040	72,275	248,655
	% of Total HH	69.7	18.7	51.1	30.3	1.2	29.1	100.0
Western	No. of HH	303,844	296,976	6,868	17,91	15,361	2,030	321,235
	% of Total HH	94.6	92.4	2.1	5.4	4.8	0.6	100.0

Access to information* goods are radio, TV and telephone
Source: Statistics Sierra Leone. 2015 Population and Housing Census

13.4.5.2 Mobility goods

Households' deprivation status in access to mobility goods (bicycle, motorbike, car, truck and boat) by region and place of residence is presented in Table 13.19. For the entire country 83.6 per cent of households are deprived in access to mobility goods. The Western Region has the lowest (80.7 per cent) and the Eastern Region the highest (87.6 per cent) proportion of deprived households.

At the national level, rural urban differences vary by 13 percentage points in favour of urban areas. The regions recorded larger rural urban differentials in the percentage of households deprived of access to mobility goods.

In the Eastern Region the proportion of deprived households in urban areas (27.5 per cent) is about half the proportion in rural areas (60.1 per cent); whilst in the Northern Region the percentages deprived in rural areas (64.7) is more than three times that of urban areas (19.1), and in the Southern Region rural deprivation (68 per cent) is more than four and a half times (14.7 per cent) that of urban dwellers.

The Western Region has the lowest percentage of households deprived of access to mobility goods in rural areas (2.4 per cent) compared to 78.3 per cent for urban areas. The Western Region is also the only region where rural households are better off with respect to mobility goods than urban households.

Table 13.19 Household deprivation status in access to mobility goods by region and place of residence

Region		Not deprived			Deprived			Total No. of households
		Total	Urban	Rural	Total	Urban	Rural	
Eastern	No. of HH	34,923	21,287	13,636	246,278	77,277	169,001	281,201
	% of Total HH	12.4	7.6	4.8	87.6	27.5	60.1	100.0
Northern	No. of HH	67,238	28,379	38,859	347,139	79,024	268,115	414,377
	% of Total HH	16.2	6.8	9.4	83.8	19.1	64.7	100.0
Southern	No. of HH	42,905	12,874	30 031	205,750	36,556	169,194	248,655
	% of Total HH	17.3	5.2	12.1	82.7	14.7	68.0	100.0
Western	No. of HH	61,975	60,858	1,117	259,260	251,479	7,781	321,235
	% of Total HH	19.3	18.9	0.3	80.7	78.3	2.4	100.0

Mobility* goods are bicycle, motorbike, car, truck and boat
Source: Statistics Sierra Leone. 2015 Population and Housing Census

13.4.5.3 Livelihood goods

The data shows that 68 per cent of households are deprived in access to livelihood goods across the entire country (Table 3.20). The Northern Region has the lowest proportion of deprived households (61.5 per cent) and the Eastern Region has the highest (75.9 per cent).

At the national level, percentages of households deprived by place of residence are similar, for urban and rural areas. Though rural urban differences persist, in the regions they are not as marked as those for mobility goods. Eastern, Northern and Southern regions have higher percentage of deprived households in rural areas compared to urban areas. In these regions rural percentages are nearly twice, two and a half times, and nearly four times the urban percentages in Eastern, Northern and Southern regions respectively. Once again the Western region is different, as the proportion of households deprived in urban areas (64.1 per cent) is several times the proportion in rural areas (1.9 per cent).

Table 13.20 Households' deprivation status in access to livelihood goods by region and place of residence

Region		Not deprived			Deprived			Total No. of households
		Total	Urban	Rural	Total	Urban	Rural	
Eastern	No. of HH	67,733	20,239	47,494	213,468	78,325	135,143	281,201
	% of Total HH	24.1	7.2	16.9	75.9	27.9	48.1	100.0
Northern	No. of HH	159,634	33,219	126,415	254,743	74,184	180,559	414,377
	% of Total HH	38.5	8.0	30.5	61.5	17.9	43.6	100.0
Southern	No. of HH	68,542	13,084	55,458	180,113	36,346	143,767	248,655
	% of Total HH	27.6	5.3	22.3	72.4	14.6	57.8	100.0
Western	No. of HH	108,942	106,296	2,646	212,293	206,041	6,252	321,235
	% of Total HH	33.9	33.1	0.8	66.1	64.1	1.9	100.0

Livelihood goods are refrigerator/freezer, livestock
Source: Statistics Sierra Leone. 2015 Population and Housing Census

The analysis of ownership of household durable goods shows that the Western Region has the highest rates while the Eastern and Northern regions have the lowest. The Western Region is also the least deprived for information and mobility goods and the Northern Region is the least deprived for access to livelihood goods. The Northern Region is also the most deprived for access to information goods, while the Eastern Region is the most deprived for access to mobility and livelihood goods.

These finding are confirmed by SSL (2006) which concluded that assets poverty is lowest in the Western Region and highest in the Northern Region and parts of the Eastern Region. These results suggest that poverty patterns by region have remained unchanged.

13.5 Summary, conclusions and recommendations

13.5.1 Summary

Three dimensions namely, education, health and standard of living and their ten indicators are used in the determination of the deprivation status of households. Forty per cent of households are deprived in primary school completion, compared to 19 per cent in child school attendance.Even though the proportions of households deprived in health indicators are very low in comparison with those of education and standard of living (1.7 per cent for child death and 0.3 per cent for maternal death), they represent one of the highest in the world.

Less than half of households are deprived in access to clean drinking water and improved floors. However, the majority of households are deprived in improved sanitation (75 per cent), access to electricity (82 per cent) and near universal deprivation in access to improved cooking fuel (98 per cent). Households seem to be well-endowed in information goods with only 24 per cent being deprived. A large percentage of households are deprived in livelihood goods (68 per cent) and mobility goods (84 per cent).

The goods most commonly owned by Sierra Leoneans are a bed (81 per cent), radio (66 per cent) and mobile phone (63 per cent). Fewer households own a charcoal iron (30 per cent) television (20 per cent), sofa (15 per cent) and fridge/freezer (10 per cent). Between five and eight per cent own a generator, motorcycle, modern stove, bicycle and computer. Ownership of goods by region follows the national pattern, except for some variations in the Western Region. Urban households have a higher ownership of goods than rural households.

Five items (electric iron, charcoal iron, fridge/freezer, modern stove and sofa) are owned in the same proportion by male and female household heads. However male-headed households own higher proportions of the remaining 11 goods than female-headed households.

Households with heads aged 55 to 59 have the highest ownership rates for 10 out the 16 goods. The exceptions are television, computer, mobile phone, modern stove, motorcycle and boat. Households with heads aged 75 years and over have the lowest proportions of ownership in 12 out of the 16 goods, the only exceptions being bed, sofa, car and boat. Households with young heads have higher ownership rates in electronic goods.

The data show that household with heads who have never married have the highest ownership rates in all but five goods (bed, bicycle, motorcycle, truck and boat). Households with heads who are engaged placed second in all but three goods, namely bed (first), car and truck (third) and households where the head is widowed have the lowest ownership rates for all goods.
Households with heads who have tertiary and higher education top the list for ownership of all durable goods except boat; achieving over 90 per cent ownership for radio, mobile phone and bed. Households whose heads have no education and those with Koranic education are the least endowed in ownership of durable goods. However, household heads with Koranic education have the highest ownership rate (5.2 per cent) of boats. Households whose heads have only kindergarten education have higher ownership rates than households whose heads have primary and JSS. Household heads with vocational, technical, nursing and teacher training educational backgrounds do better than those with SSS and they in turn do better than all the educational levels below them.

In terms of economic activity status, generally households with heads who are employed have the lowest ownership rates of goods, while households with heads who are unemployed have the highest ownership rates of all durable goods.

Employment status of head of household revealed that households with heads who are pensioners are leaders in ownership of durable goods (except access to information goods, bed and motorcycle, where paid employees fare better). Households with heads who are unpaid apprentices, self-employed without employees and unpaid family worker are the least endowed.

13.5.2 Conclusion

Recognizing the impact of education on human development, one of the Government's objectives (through its education sector plan 2014-2018) is to ensure that all children enter school and complete primary education. This is to be achieved by:

- Providing more classrooms in the communities.
- Reducing the cost of schooling to parents and households to encourage parents to send children to school.
- Providing targeted support programme for needy students.
- Providing support for extra-curricular activities and accelerated primary education for older children and young persons aged 10-15.

Sierra Leone has the highest child and maternal mortality rates in the world. The causes of these high rates of death are known and the measures to reduce them have been identified. UNICEF and the European Union are working with the Government to reduce these deaths through investment in training, equipment, medical supplies and maternal and child health infrastructure.

The Government of Sierra Leone is very much alive to its responsibilities towards its citizens and knows exactly what needs to be done to improve the situation, whether in education, health or housing. Some programmes have been implemented which seemed to address the issues, but did not yield the intended results because funds run out. The basic lack of adequate government funding is at the core of the education, health and housing problems.

13.5.3 Recommendations

The country needs long term sustainable sources of funding. One way of raising the funds may be for the Government to mortgage some of its untapped mineral wealth.

The Ebola outbreak in Sierra Leone and its neighbours in 2014-2015, and the way it spread to other countries and continents emphasized the fact that the world is indeed a global village. The international community is very much aware of this and have rallied to the support of Sierra Leone and still continue to do so. However, the problems still remain. This is an indication that things must be done differently to obtain the desired results. Support for the country needs be on a much larger scale, well-coordinated and comprehensive to achieve the impact required. Perhaps there should be a type of post-war massive reconstruction effort led by an international organization such as the United Nations.

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CHAPTER 14: PERSONS WITH DISABILITY

14.1 Introduction

According to the World Health Organization (WHO), disability is a contested concept, with different meanings for different communities. It may be used to refer to physical or mental attributes that some institutions, particularly medical, view as needing to be fixed. It is an impairment that may be cognitive, developmental, intellectual, mental, physical, sensory, or some combination of these. It substantially affects a person's life activities and may be present from birth or occur during a person's lifetime.

Disability is an umbrella term, covering impairments, activity limitations, and participation restrictions. Impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations.

Disability is thus not just a health problem. It is a complex phenomenon, reflecting the interaction between features of a person's body and features of the society in which he or she lives. According to the WHO report 2016, it is estimated that 15 per cent of the world's population experience some form of disability or impairment.

A number of efforts have been put in place by the Government of Sierra Leone to improve the welfare of Persons With Disability (PWD). The 1991 Constitution in chapter II, section 8(3)(f) states that the state shall direct its policy towards ensuring that the care and welfare of the aged, young and disabled shall be actively promoted and safeguarded. Section 9 (1)(b) further states that Government shall direct its policy towards ensuring that there are equal rights and adequate educational opportunities for all citizens at all level by safeguarding the rights of vulnerable groups, such as children, women and PWDs in security, educational facilities, and providing the necessary facilities for education as and when practicable.

The Disability Act of 2011 established a National Commission for PWD and a National Development Fund for PWD. In addition, the law states the rights and privileges of PWDs. It prohibits discrimination against persons with physical, sensory, intellectual and mental disabilities in employment and provision of state services including judicial services, and it calls for free health care and education for PWDs, equal access to government buildings, housing and public transportation, and provision of rehabilitation services.

14.2 Data sources

The 2015 Population and Housing Census included questions to enhance the understanding of the disability status of the population of Sierra Leone. The questionnaire elicited information from the respondents on the status, type and cause of disability. The PWD were also requested to state whether they were receiving any kind of assistance or treatment. For the purpose of the enumeration exercise, PWD included; the blind, the crippled, the deaf, the dumb, the mentally retarded, those who lost limbs, the speech impaired and albinos.

The results presented in this chapter are therefore based on the 2015 Census data. It should however be noted that during the data collection information was recorded as reported by the respondents. The enumerators did not test to confirm the disability status of the household members.

14.3 Disability status

14.3.1 Distribution of the population by disability status, place of residence and sex

A total of 93,129 people, or 1.3 per cent of the total population of Sierra Leone, had disabilities at the time of the 2015 Census enumeration (Table 14.1). The overall percentage of PWD revealed a reduction in the population with disabilities compared to the last Census of 2004 which found 2.4 per cent of the total population with disabilities.

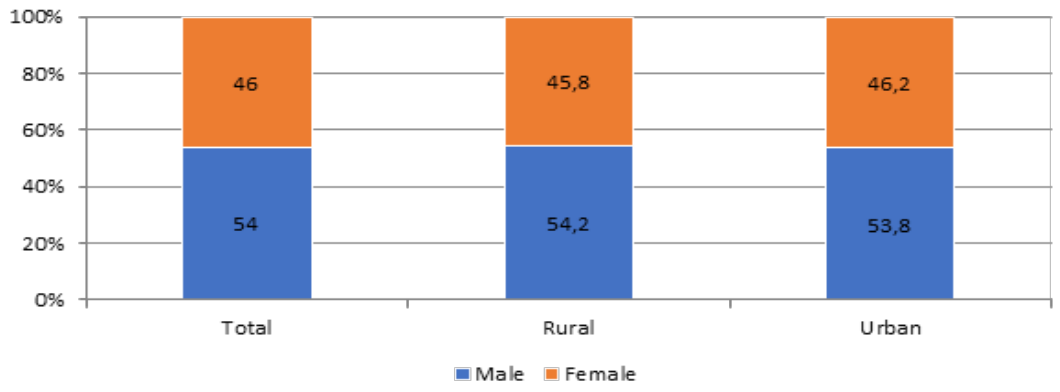
Table 14.1 Distribution of the population by disability status, place of residence and sex

Region	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Number	7,076,119	3,479,633	3,596,486	4,182,612	2,049,590	2,133,022	2,893,507	1,430,043	1,463,464
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Yes	1.3	1.4	1.2	1.5	1.6	1.3	1.1	1.2	1.0
No	92.3	92.2	92.5	93.4	93.3	93.6	90.8	90.7	90.8
Don't Know	6.3	6.3	6.3	5.1	5.0	5.1	8.2	8.2	8.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The percentage distribution of PWD by sex and place of residence is presented in Figure 14.1. The findings revealed that most of PWD were males (54 per cent). The proportions of male PWDs by place of residence were 54.2 per cent and 53.8 per cent for rural and urban areas respectively. The corresponding figures for female PWDs were 45.8 and 46.2 per cent for rural and urban areas respectively.

Figure 14.1 Persons with disability by sex and place of residence (per cent)

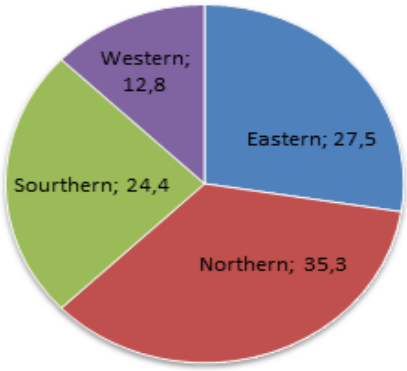


Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.3.2 Distribution of the population by disability status, region and sex

A look at the regional distribution of PWDs showed that the Northern Region had the biggest proportion (35.3 per cent) while the Western Region had the least (12.8 per cent).

Figure 14.2 Persons with disability by region (percent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

The percentage distribution of the population by disability status, region and gender is presented in Table 14.2 below. Generally, the results presented in the table exhibit a trend similar to the one depicted by figure 14.2. No major variations were noted when the PWDs and non-PWDs were distributed by gender and the region of residence. However, it is worth noting that the Northern Region again had the highest proportion, even among persons with no disabilities.

Table 14.2 Distribution of the population by region, disability status and sex

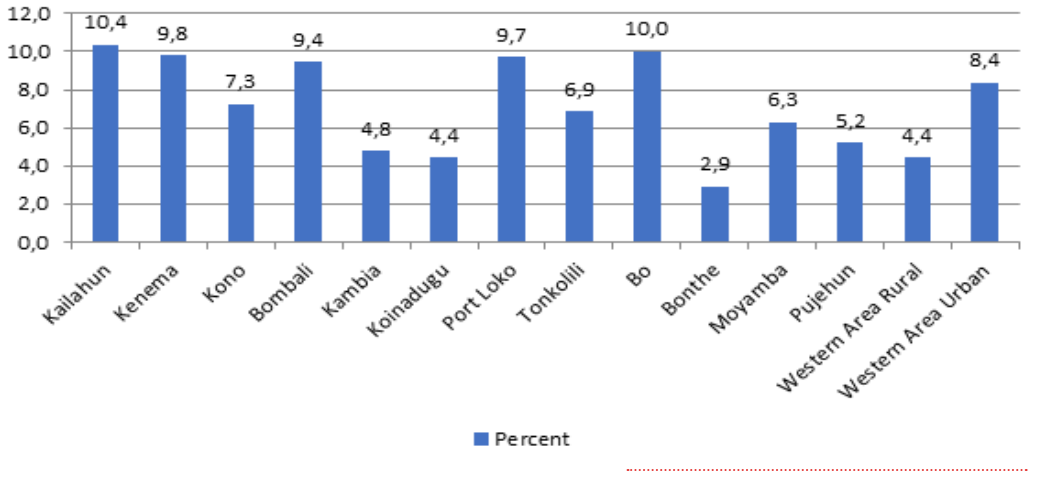
Region	Total		Disability		No Disability		Don't Know	
	Male	Female	Male	Female	Male	Female	Male	Female
Number	3,479,633	3,596,486	50,319	42,810	3,209,111	3,325,531	220,203	228,145
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Eastern	23.4	23.0	28.1	26.7	23.3	22.9	23.3	23.2
Northern	35.1	35.6	34.5	36.2	36.0	36.5	22.6	23.2
Southern	20.1	20.5	24.3	24.7	20.0	20.4	21.2	21.7
Western	21.4	20.8	13.2	12.4	20.7	20.2	33.0	31.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.3.3 Distribution of the population by disability status, district and sex

Further analysis by district of residence revealed that the districts of Kailahun and Bo had considerably higher percentages of PWD, as shown in Figure 14.3. Bonthe district on the other hand had the lowest proportion (2.9 percent).

Figure 14.3 Distribution of the persons with disability by district



Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 14.3 presents a distribution of the population by disability status, district and sex. Kailahun district presented the highest percentages of the male (10.3) and female (10.4) PWD. The high proportion in Kailahun district could be attributed to the Civil War . Bonthe district had the lowest percentage share of PWDs for both males (2.9 per cent) and females (3.0 per cent). Koinadugu and Pujehun districts had similar percentage shares for males and females. The distribution of the household population by disability status and chiefdom is presented in Appendix Table A14.1.

Table 14.3 Distribution of the population by disability status, district and sex

District	Total		Disability		No Disability		Don't Know	
	Male	Female	Male	Female	Male	Female	Male	Female
Number	3,479,633	3,596,486	50,319	42,810	3,209,111	3,325,531	220,203	228,145
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kailahun	7.5	7.4	10.3	10.4	7.7	7.6	4.2	4.2
Kenema	8.6	8.6	10.3	9.3	8.6	8.5	9.0	9.1
Kono	7.3	7.0	7.5	6.9	7.0	6.8	10.1	9.9
Bombali	8.5	8.6	9.3	9.6	8.6	8.7	7.4	7.8

Table 14.3 Distribution of the population by disability status, district and sex (continued)

District	Total		Disability		No Disability		Don't Know	
	Male	Female	Male	Female	Male	Female	Male	Female
Kambia	4.7	5.0	4.6	5.1	5.0	5.2	1.1	1.2
Koinadugu	5.9	5.7	4.4	4.4	6.1	5.9	2.7	2.8
Port Loko	8.4	8.9	9.4	10.1	8.6	9.0	6.1	6.3
Tonkolili	7.6	7.5	6.7	7.0	7.7	7.6	5.2	5.2
Bo	8.0	8.2	10.0	10.1	7.7	7.8	13.2	13.7
Bonthe	2.8	2.8	2.9	3.0	3.0	2.9	1.2	1.1
Moyamba	4.4	4.6	6.2	6.5	4.4	4.6	4.1	4.2
Pujehun	4.9	4.9	5.2	5.2	5.0	5.1	2.7	2.8
Western Rural	6.3	6.2	4.7	4.1	6.3	6.1	7.3	7.1
Western Urban	15.1	14.6	8.5	8.3	14.4	14.0	25.7	24.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Generally, most of PWDs were living in separate houses (Table 14.4). About two thirds of the PWDs in the Northern, Eastern and Southern regions were enumerated in separate houses. In the Western Region however, irrespective of gender, one in every three PWD were living in flats or apartments. The Western Region also had the highest percentage of PWDs enumerated in improvised homes and uncompleted buildings. The results do not show variation in type of dwelling by sex of the PWD.

Table 14.4 Distribution of persons with disability aged 15 years and over by type of dwelling, region and sex

District	Total		Eastern		Northern	
	Male	Female	Male	Female	Male	Female
Number	41,271	35,750	11,521	9,365	14,044	12,944
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Separate house	60.0	60.1	66.9	66.8	62.7	62.7
Semi-detached house	5.9	5.7	5.8	5.4	4.7	4.7
Flat/ apartment	18.2	18.4	14.3	14.2	17.5	17.9
Compound house	8.7	9.1	8.2	8.6	7.2	7.5
Huts buildings (Same Compound)	2.6	2.6	1.9	2.1	3.4	3.1
Huts buildings (Different compound)	1.5	1.4	1.5	1.4	2.2	2.0
Tent	0.8	0.8	0.5	0.5	1.4	1.4
Improvised home	1.5	1.1	0.3	0.2	0.4	0.2
Uncompleted building	0.6	0.5	0.4	0.4	0.4	0.4
Other	0.2	0.2	0.2	0.4	0.1	0.2

District	Southern		Western	
	Male	Female	Male	Female
Number	10,141	8,972	5,565	4,469
Per cent	100.0	100.0	100.0	100.0
Separate house	66.3	65.3	27.7	27.7
Semi-detached house	5.1	5.3	10.9	10.1
Flat/ apartment	16.2	16.8	31.6	32.0
Compound house	7.1	7.3	16.5	18.0
Huts buildings (Same Compound)	2.5	2.6	2.6	2.4
Huts buildings (Different compound)	1.4	1.2	0.2	0.3
Tent	0.6	0.6	0.2	0.3
Improvised home	0.3	0.2	8.6	7.6
Uncompleted building	0.4	0.4	1.6	1.3
Other	0.2	0.2	0.2	0.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The distribution of PWDs aged 15 years and over by tenure status, region and sex is presented in Table 14.5. It is seen that irrespective of gender considerations, most PWDs were living in houses constructed by their households. The highest percentage of PWDs living in constructed houses is recorded in the Northern Region with 64.5 per cent for males and 61.8 per cent for females. In the Eastern and Southern regions, close to three in every five PWDs were staying in their own constructed houses.

However, the important tenure status in the Western Region is privately renting, constituting about 36 per cent, followed by constructed dwelling unit forming 30.5 per cent for males and 31.8 per cent for females. Furthermore, there were no significant variations when the analysis was carried out by the gender of the PWD.

Table 14.5 Distribution of persons with disability aged 15 years and over by tenure status, region and sex

District	Total		Eastern		Northern	
	Male	Female	Male	Female	Male	Female
Number	41,271	35,750	11,521	9,365	14,044	12,944
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Owner						
Purchased	1.9	1.8	1.2	1.1	1.4	4.7
Constructed	57.1	55.6	59.5	57.9	64.5	17.9
Inherited	23.1	25.9	23.7	26.3	22.1	7.5
Employer provided						
Government	0.9	0.7	0.8	0.7	0.7	2.0
Private	0.6	0.5	0.6	0.5	0.4	1.4
Parastatal/ Quasi Government	0.1	0.1	0.1	0.1	0.1	0.2
Renting						
Government	0.6	0.4	0.4	0.2	0.5	0.4
Housing Corporation	1.4	1.2	1.6	1.5	1.3	1.0
Private	11.1	10.4	9.4	9.0	5.8	5.5
Parastatal/ Quasi Government	0.1	0.1	0.1	0.1	0.1	0.0
Other						
Squatter	0.7	0.6	0.4	0.3	0.9	0.7
Other	2.5	2.6	2.2	2.4	2.2	2.6

Table 14.5 Distribution of persons with disability aged 15 years and over by tenure status, region and sex (continued)

District	Southern		Western	
	Male	Female	Male	Female
Number	10,141	8,972	5,565	4,469
Percent	100.0	100.0	100.0	100.0
Owner				
Purchased	1.8	1.7	4.5	4.1
Constructed	58.5	56.3	30.5	31.8
Inherited	27.7	30.6	15.9	17.1
Employer provided				
Government	0.9	0.7	1.4	0.9
Private	0.4	0.3	1.4	1.0
Parastatal/ Quasi Government	0.1	0.1	0.3	0.0
Renting				
Government	0.3	0.2	2.1	1.7
Housing Corporation	0.8	0.8	2.4	2.1
Private	6.7	6.3	35.9	36.0
Parastatal/ Quasi Government	0.0	0.0	0.2	0.3
Other				
Squatter	0.6	0.6	1.1	1.1
Other	2.1	2.4	4.3	3.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.4 Demographic characteristics of people with disabilities

14.4.1 Persons with disability by place of residence

The disability rates by place of residence and sex are presented in Table 14.6. Overall, 1.3 per cent of the total population were PWDs at the time of the 2015 Census enumeration. The rural areas have a higher rate of PWDs than urban areas. Irrespective of the place of residence, the rate is higher for males than their female counterparts.

Table 14.6 Disability rates by place of residence and sex

Region	Total	Male	Female
Total	1.3	1.5	1.2
Rural	1.5	1.7	1.3
Urban	1.1	1.2	1.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.4.2 Persons with disability by region

The disability rates varied from 0.8 per cent in the Western Region to 1.6 per cent in the Southern and Eastern regions (Table 14.7). Among the males, the Eastern and Southern regions showed higher disability rates. The same regions (Eastern and Southern) showed higher rates for females.

Table 14.7 Disability rates by region and sex

Region	Total	Male	Female
Total	1.3	1.5	1.2
Eastern	1.6	1.7	1.4
Northern	1.3	1.4	1.2
Southern	1.6	1.7	1.4
Western	0.8	0.9	0.7

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.4.3 Persons with disability by district

The districts with high disability rates are Kailahun, Moyamba and Bo (Table 14.8). A similar trend is depicted when the analysis is carried out by gender. On the other hand, Western Urban shows the lowest disability rates when compared with other districts.

Table 14.8 Disability rates by district and sex

District	Total	Male	Female
Total	1.3	1.5	1.2
Kailahun	1.8	2.0	1.7
Kenema	1.5	1.7	1.3
Kono	1.3	1.5	1.2
Bombali	1.5	1.6	1.3
Kambia	1.3	1.4	1.2
Koinadugu	1.0	1.1	0.9
Port Loko	1.5	1.6	1.4
Tonkolili	1.2	1.3	1.1
Bo	1.6	1.8	1.5
Bonthe	1.4	1.5	1.2
Moyamba	1.8	2.0	1.7
Pujehun	1.4	1.6	1.3
Western Area Rural	0.9	1.1	0.8
Western Area Urban	0.7	0.8	0.7

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.4.4 Main disability type by place of residence and sex

Types of disabilities include various physical and mental impairments that can hamper or reduce a person's ability to carry out his day to day activities. Disability can be broken down into a number of broad sub-categories, which include the following: mobility and physical impairment, spinal cord disability, head injuries or brain disability, vision disability, hearing disability, cognitive or learning disabilities, psychological disorders, invisible disabilities. The 2015 Census collected information on such types of disabilities and the results are presented in the tables and figures below.The most contributing factors or the most common types of disability in Sierra Leone at the time of the census were; physical disability or polio (21.8 per cent), partially sighted (15.2 per cent), blind or visually impaired (12.5 per cent) and physical disability or amputee (8.9 per cent). Kyphoscoliosis (hunch back) and albinism were the least dominant types of disability representing 0.7 and 0.5 per cent respectively (Table 14.9).

The distribution of PWDs by place of residence showed that physical disabilities (polio) were the leading disability in both rural and urban areas. It is noted however that within the place of residence distribution, the proportion of persons with physical disabilities was higher in urban than in the rural areas. The males, irrespective of place of residence, were slightly more affected than their female counterparts. Furthermore, the findings also reveal that vision disabilities (visual impaired and partially sighted) are slightly more prevalent in the rural areas than in the urban areas. Unlike the physical disability, the vision disability seems to affect more females than males in both rural and urban settings.

Table 14.9 Distribution of the population by type of disability, place of residence and sex

Main type of disability	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Number	93,129	50,319	42,810	62,380	33,779	28,601	30,749	16,540	14,209
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Physical disability (Polio)	21.8	22.4	21.2	20.1	20.3	20.0	25.3	26.7	23.8
Physical disability (Amputee)	8.9	9.7	8.0	8.4	9.1	7.5	10.0	10.9	9.0
Blind or visual impaired	12.5	13.5	11.3	13.4	14.6	12.1	10.6	11.4	9.7
Partially sighted	15.2	14.9	15.6	15.7	15.9	15.6	14.2	13.1	15.5
Deaf	6.8	6.1	7.5	7.4	6.6	8.2	5.6	5.1	6.2
Partially deaf	5.1	4.5	5.7	5.4	4.9	5.9	4.5	3.9	5.3
Speech difficulties	3.9	4.0	3.7	3.6	3.7	3.4	4.5	4.6	4.4
Mute/ dumb	3.5	3.4	3.6	3.4	3.4	3.4	3.7	3.4	4.1
Mental difficulties	4.7	4.8	4.6	4.7	4.6	4.9	4.7	5.1	4.1
Spinal injury	3.1	3.2	2.9	3.2	3.3	3.0	2.9	3.1	2.7
Psychiatric disability	1.4	1.3	1.5	1.4	1.3	1.5	1.3	1.3	1.4
Epileptic	2.4	2.3	2.6	2.6	2.5	2.6	2.2	2.0	2.4
Rheumatism	1.7	1.3	2.1	1.8	1.3	2.3	1.5	1.1	1.8
Albinism	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.5	0.7
Kyphoscoliosis Hunch back)	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.8
Other	7.7	7.4	8.2	7.8	7.4	8.2	7.7	7.3	8.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.4.5 Main disability type by region and sex

On average, the Northern Region has the largest proportion of PWDs with different types of disabilities (Table 14.10). It is worth noting that even kyphoscoliosis (hunch back), which is the least dominant disability in the country, is more prevalent in the Northern Region (41.6 per cent) than in the other regions . Furthermore, considering all types of disabilities, the Western Region presented the lowest percentage share.

Table 14.10 Distribution of the PWDs by main type of disability by region (per cent)

Main type of disability	Total	Eastern	Northern	Southern	Western
Number	100.0	24.5	40.8	18.3	16.4
Percent	100.0	33.8	27.2	23.0	16.0
Physical disability (Polio)	100.0	25.7	37.6	25.5	11.3
Physical disability (Amputee)	100.0	24.0	40.0	25.2	10.8
Blind or visual impaired	100.0	35.0	30.7	25.5	8.9
Partially sighted	100.0	30.0	36.5	25.3	8.2
Deaf	100.0	26.5	35.3	22.1	16.0
Partially deaf	100.0	28.8	36.9	21.1	13.1
Speech difficulties	100.0	33.0	30.6	26.2	10.1
Mute/ dumb	100.0	24.2	29.8	30.5	15.6
Mental difficulties	100.0	28.0	30.4	29.6	11.9
Spinal injury	100.0	22.7	38.6	29.4	9.3
Psychiatric disability	100.0	29.6	25.2	34.8	10.4
Epileptic	100.0	32.7	29.3	21.8	16.2
Rheumatism	100.0	20.8	41.6	25.7	12.0
Albinism	100.0	29.1	25.2	33.3	12.5
Kyphoscoliosis Hunch back)	0.7	0.7	0.8	0.7	0.7
Other	7.7	7.4	8.2	7.8	7.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 14.11 presents the distribution of the PWDs by main type of disability, region and sex. Irrespective of gender, the most common types of disability are; physical disability (polio and amputee), visual impairment, partially sighted, deaf and partially deaf. Slightly, more females than males reported physical disabilities or polio, deaf, partially deaf and mental difficulties in the Eastern and Southern regions. The distribution of the PWDs by administrative area and type of disability is shown in Appendix Table A14.2.

Table 14.11 Distribution of the PWDs by main type of disability, region and sex

Main type of disability	Total		Eastern		Northern	
	Male	Female	Male	Female	Male	Female
Number	50,319	42,810	14,150	11,427	17,337	15,512
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Physical disability (Polio)	22.4	21.2	19.4	19.6	26.3	24.2
Physical disability (Amputee)	9.7	8.0	12.0	9.7	7.4	6.3
Blind or visual impaired	13.5	11.3	12.8	10.3	14.3	12.3
Partially sighted	14.9	15.6	13.7	12.8	16.2	18.5
Deaf	6.1	7.5	7.7	9.8	5.4	6.4
Partially deaf	4.5	5.7	5.0	6.2	4.7	5.9
Speech difficulties	4.0	3.7	3.9	3.5	4.0	3.7
Mute/ dumb	3.4	3.6	3.5	4.0	3.7	3.7
Mental difficulties	4.8	4.6	5.5	5.8	4.3	3.8
Spinal injury	3.2	2.9	3.0	2.3	2.6	2.6
Psychiatric disability	1.3	1.5	1.4	1.4	1.1	1.3
Epileptic	2.3	2.6	1.9	2.2	2.5	2.8
Rheumatism	1.3	2.1	1.4	2.3	0.9	1.5
Albinism	0.5	0.5	0.7	0.6	0.5	0.4
Kyphoscoliosis (Hunch back)	0.7	0.8	0.6	0.5	0.8	0.9
Other	7.4	8.2	7.6	8.9	5.5	5.6

Table 14.11 Distribution of the PWDs by main type of disability, region and sex (continued)

Main type of disability	Southern		Western	
	Male	Female	Male	Female
Number	12,207	10,563	6,625	5,308
Percent	100.0	100.0	100.0	100.0
Physical disability (Polio)	16.3	16.5	29.8	25.5
Physical disability (Amputee)	9.4	7.3	11.6	10.5
Blind or visual impaired	14.2	11.6	11.7	10.2
Partially sighted	16.5	14.8	11.5	14.5
Deaf	6.4	7.9	4.4	5.1
Partially deaf	4.7	5.9	2.7	3.9
Speech difficulties	3.7	3.3	4.8	4.9
Mute/ dumb	3.0	3.0	3.2	4.1
Mental difficulties	4.8	5.3	4.0	3.3
Spinal injury	3.9	3.8	3.8	3.6
Psychiatric disability	1.4	2.0	1.3	1.2
Epileptic	2.9	2.9	1.6	1.9
Rheumatism	1.8	3.1	1.0	1.8
Albinism	0.5	0.5	0.5	0.9
Kyphoscoliosis (Hunch back)	0.7	0.8	0.6	0.8
Other	9.9	11.4	7.2	7.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.4.6 Main disability type by household size

The distribution of PWD by type of disability and average household size is presented in Table 14.12. Irrespective of the type of disability, the findings revealed a correlation between the disability status and the size of household. The prevalence of disability was directly proportional to the size of the household. Most of the PWDs, irrespective of the type, were living in or had families with more than six persons. This could be attributed to the assistance needed to be extended to PWDs, where more people are required.

Table 14.12 Persons with disability by type of disability and average household size (per cent)

Main type of disability	Total	Average Household Size		
		1-3 Persons	4-6 Persons	6+ Persons
Total	100.0	15.3	34.9	49.8
Physical disability (Polio)	100.0	13.8	35.1	51.0
Physical disability (Amputee)	100.0	14.9	34.5	50.6
Blind or visually impaired	100.0	16.2	34.2	49.5
Partially sighted	100.0	17.7	34.9	47.4
Deaf	100.0	13.8	35.0	51.2
Partially deaf	100.0	15.3	35.9	48.7
Speech difficulties	100.0	13.7	34.1	52.1
Mute	100.0	11.8	34.0	54.2
Mental difficulties	100.0	16.4	33.0	50.6
Spinal injury/disability	100.0	17.6	33.6	48.8
Psychiatric disability	100.0	15.9	36.3	47.9
Epileptic	100.0	11.9	34.5	53.7
Rheumatism	100.0	18.1	34.8	47.1
Albinism	100.0	13.6	36.5	49.9
Kyphoscoliosis (Hunch Back)	100.0	15.5	33.0	51.4
Other	100.0	16.6	37.1	46.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Further analysis of the main type of disability, household size and sex was carried out and the results are presented in Table 14.13. No major differences are noted when the percentages are compared across the different household size categories by gender of the PWDs.

Table 14.13 Distribution of the population by main type of disability, household size and sex

Main type of disability	1 – 3 Persons		4 – 6 Persons		Over 6 Persons	
	Male	Female	Male	Female	Male	Female
Number	8,025	6,257	17,344	15,132	24,950	21,421
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Physical disability (Polio)	22.4	21.2	21.1	17.9	22.9	21.8
Physical disability (Amputee)	9.7	8.0	9.6	7.5	9.9	8.1
Blind or visual impaired	13.5	11.3	15.0	11.0	12.9	11.9
Partially sighted	14.9	15.6	16.8	18.7	14.3	14.7
Deaf	6.1	7.5	5.2	7.3	6.4	7.6
Partially deaf	4.5	5.7	4.1	6.4	4.5	5.5
Speech difficulties	4.0	3.7	3.5	3.4	4.1	3.9
Mute/ dumb	3.4	3.6	2.6	2.9	3.7	3.9
Mental difficulties	4.8	4.6	4.8	5.3	5.0	4.5
Spinal injury	3.2	2.9	3.6	3.4	3.2	2.9
Psychiatric disability	1.3	1.5	1.4	1.5	1.2	1.4
Epileptic	2.3	2.6	1.7	2.1	2.5	2.8
Rheumatism	1.3	2.1	1.3	2.8	1.2	2.0
Albinism	0.5	0.5	0.5	0.5	0.6	0.5
Kyphoscoliosis (Hunch back)	0.7	0.8	0.6	0.9	0.7	0.8
Other	7.4	8.2	8.2	8.6	6.9	7.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.4.7 Type of disability by age

Overall, disabilities were more prevalent among persons aged over 15 years, with the majority falling in the age groups 15 to 35 years and 36 to 60 years (Table 14.14). However, vision disabilities, (blind or visually impaired and partially sighted) are more prevalent in persons over 60 years of age. In addition, males are more affected by the different types of disabilities than females. It is worth noting that vision disabilities are more prevalent in females 36 years and above than they are in males, whereas the opposite is true for younger age groups.

Table 14.14 Distribution of the PWDs by main type of disability, broad age-groups and sex

Main type of disability	All Ages			0 - 14 Years			15 - 35 Years		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	100.0	100.0	100.0	17.3	18.0	16.5	30.9	30.3	31.6
Physical disability (Polio)	100.0	100.0	100.0	21.7	21.7	21.7	38.5	37.6	39.7
Physical disability (Amputee)	100.0	100.0	100.0	19.6	18.1	21.8	34.4	32.5	37.0
Blind or visually impaired	100.0	100.0	100.0	6.6	6.7	6.5	16.0	14.9	17.4
Partially sighted	100.0	100.0	100.0	8.5	9.0	7.9	18.5	18.6	18.5
Deaf	100.0	100.0	100.0	21.8	26.2	17.7	33.9	32.3	35.4
Partially deaf	100.0	100.0	100.0	22.5	26.0	19.3	30.0	29.4	30.6
Speech difficulties	100.0	100.0	100.0	31.1	31.7	30.4	39.5	39.0	40.3
Mute	100.0	100.0	100.0	33.6	36.3	30.7	45.7	42.9	48.8
Mental difficulties	100.0	100.0	100.0	17.1	17.0	17.1	50.8	55.3	45.4
Spinal injury/ disability	100.0	100.0	100.0	11.0	11.7	10.1	26.6	27.2	26.0
Psychiatric disability	100.0	100.0	100.0	14.0	14.6	13.5	31.1	31.0	31.1
Epileptic	100.0	100.0	100.0	31.0	33.8	27.9	47.2	46.2	48.3
Rheumatism	100.0	100.0	100.0	7.5	8.9	6.5	17.7	20.1	16.0
Albinism	100.0	100.0	100.0	30.5	29.2	32.1	29.5	29.6	29.5
Kyphoscoliosis (Hunch back)	100.0	100.0	100.0	22.4	20.2	24.8	40.5	42.9	37.9
Other	100.0	100.0	100.0	14.8	17.2	12.2	27.5	26.6	28.4

Table 14.14 Distribution of the PWDs by main type of disability, broad age-groups and sex (continued)

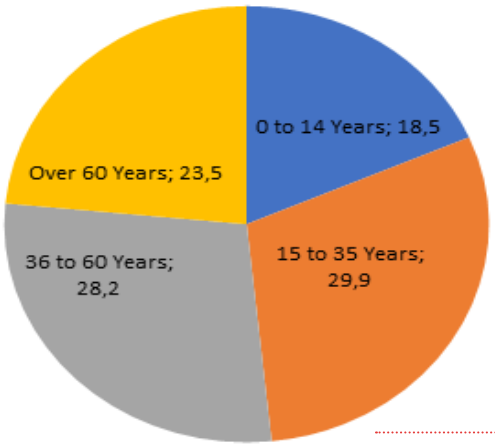
Main type of disability	36 - 60 Years			Over 60 Years		
	Total	Male	Female	Total	Male	Female
Total	29.4	30.7	27.9	22.4	21.0	24.0
Physical disability (Polio)	28.1	30.0	25.7	11.7	10.7	12.9
Physical disability (Amputee)	31.5	34.8	26.7	14.5	14.6	14.5
Blind or visually impaired	33.0	34.7	30.5	44.4	43.6	45.6
Partially sighted	34.2	35.5	32.9	38.7	36.9	40.8
Deaf	25.9	24.9	26.8	18.4	16.6	20.1
Partially deaf	25.4	25.8	24.9	22.1	18.8	25.2
Speech difficulties	18.3	19.3	17.1	11.0	10.1	12.2
Mute	16.3	16.6	15.9	4.4	4.2	4.6
Mental difficulties	24.4	22.5	26.7	7.7	5.2	10.8
Spinal injury/ disability	36.9	39.4	33.7	25.5	21.8	30.2
Psychiatric disability	34.1	37.0	31.1	20.9	17.5	24.3
Epileptic	14.6	12.8	16.5	7.2	7.1	7.3
Rheumatism	34.1	35.9	32.9	40.7	35.0	44.6
Albinism	25.9	25.1	26.9	14.0	16.1	11.5
Kyphoscoliosis (Hunch back)	23.9	23.9	23.9	13.2	13.0	13.4
Other	36.2	36.7	35.6	21.6	19.6	23.7

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The 2015 Census also collected information on persons with more than one disability. Out of the 93,129 persons with disability, 30,869 people reported a second disability. A total of 16,703 PWDs with a second disability were males, while 14,166 were females.

Figure 14.4 presents the distribution of the PWDs that reported a second disability. The findings revealed that persons aged between 15 and 35 years presented a high proportion of those with a second type of disability (29.9 per cent) followed by persons aged between 36 and 60 years (28.2 per cent).

Figure 14.4 Distribution of the population by second type of disability (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

An analysis of the distribution of the population by second type of disability in Table 14.15 shows that there were no major variations by gender of the PWDs.

Table 14.15 Distribution of population by second type of disability, broad age-groups and sex

Main type of disability	All Ages			0 - 14 Years			15 - 35 Years		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Number	93,129	50,319	42,810	16,108	9,048	7,060	28,792	15,257	13,535
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	66.9	66.8	66.9	64.6	64.7	64.5	68.0	67.9	68.1
Physical - (Polio)	5.6	5.7	5.4	7.2	7.1	7.4	6.9	7.1	6.6
Physical - (Amputee)	3.9	4.1	3.6	4.2	4.5	3.8	4.0	4.0	4.0
Blind or visually impaired	2.9	3.1	2.5	1.5	1.5	1.4	1.7	2.0	1.4
Partially sighted	3.5	3.5	3.4	2.0	1.9	2.1	2.0	1.9	2.0
Deaf	2.6	2.5	2.8	3.1	3.2	3.0	2.8	2.7	3.0
Partially deaf	2.0	1.8	2.2	1.8	1.6	2.1	1.6	1.6	1.7
Speech difficulties	2.6	2.5	2.6	3.7	3.6	3.8	2.9	2.8	3.1
Mute	1.6	1.5	1.6	2.8	2.8	2.8	2.0	1.9	2.0
Mental difficulties	1.6	1.5	1.6	1.9	1.7	2.0	2.3	2.4	2.2
Spinal injury/ disability	1.0	1.1	1.0	0.7	0.7	0.7	0.8	1.0	0.7
Psychiatric disability	0.6	0.6	0.7	0.6	0.5	0.7	0.7	0.6	0.7
Epileptic	1.0	0.9	1.0	2.8	2.7	2.9	0.9	0.9	1.0
Rheumatism	0.6	0.5	0.7	0.2	0.3	0.2	0.3	0.2	0.3
Albinism	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.2
Kyphoscoliosis (Hunch back)	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Others	3.5	3.4	3.6	2.6	2.8	2.4	2.8	2.7	2.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 14.15 Distribution of population by second type of disability, broad age-groups and sex (continued)

Main type of disability	36 - 60 Years			Over 60 Years		
	Total	Male	Female	Total	Male	Female
Number	27,376	15,430	11,946	20,853	10,584	10,269
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
None	68.2	68.1	68.4	65.3	65.2	65.4
Physical - (Polio)	5.2	5.3	5.0	3.0	3.0	3.1
Physical - (Amputee)	4.1	4.5	3.6	3.1	3.4	2.9
Blind or visually impaired	3.2	3.4	2.9	5.1	5.9	4.3
Partially sighted	4.1	4.3	3.8	5.9	6.1	5.8
Deaf	2.2	2.1	2.4	2.5	2.2	2.7
Partially deaf	1.6	1.5	1.8	3.3	2.8	3.7
Speech difficulties	1.9	1.9	2.0	2.1	2.1	2.1
Mute	1.1	1.0	1.3	0.6	0.7	0.5
Mental difficulties	1.2	1.2	1.3	0.8	0.7	0.9
Spinal injury/ disability	1.1	1.2	1.0	1.4	1.4	1.4
Psychiatric disability	0.7	0.6	0.7	0.5	0.5	0.5
Epileptic	0.4	0.4	0.5	0.3	0.3	0.3
Rheumatism	0.7	0.5	0.9	1.2	1.1	1.3
Albinism	0.2	0.2	0.1	0.1	0.1	0.1
Kyphoscoliosis (Hunch back)	0.2	0.2	0.1	0.2	0.2	0.1
Others	4.0	3.8	4.2	4.6	4.4	4.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.4.8 Cause of disability by sex, broad age group, place of residence and region

The 2015 Census collected information on the main causes of disability which include; congenital from birth, diseases or illness, transport accident, occupational injury, other accident, war and natural ageing.

Table 14.16 presents the distribution of the population by cause of main type of disability and selected characteristics like sex, age group, place of residence and region. The findings show that irrespective of the selected characteristics chosen, disease and/or illness is the major cause of disability followed by congenital from birth.

It is however worth noting that for people aged over 60 years, natural ageing constitutes a considerable percentage (28.3) of disabilities. Physical impairments, sight problems and changing mental states are often experienced by people as they age.

More males than females reported the cause of their disability as a transport accident, occupational injury, other accident or war. On the other hand, disease and/or illness and war are reported more by rural than urban residents as the causes of disability.

Table 14.16 Distribution of population by cause of main type of disability and selected characteristics

Selected characteristics	Total	Congenital from birth	Disease/ illness	Transport accident	Occupational injury
Total	100.0	16.2	40.5	4.6	4.5
Male	100.0	16.2	38.2	5.7	5.9
Female	100.0	16.1	43.1	3.3	2.8
Broad Age					
Total	100.0	16.2	40.5	4.6	4.5
0 - 14	100.0	32.1	36.9	2.5	1.3
15 - 35	100.0	21.5	40.8	5.0	3.2
36 - 60	100.0	10.2	42.3	6.2	6.5
60+	100.0	4.2	40.2	3.7	5.9
Place of residence					
Total	100.0	16.2	40.5	4.6	4.5
Rural	100.0	15.3	41.8	3.9	5.0
Urban	100.0	17.9	37.7	6.0	3.4
Region					
Total	100.0	16.2	40.5	4.6	4.5
Eastern	100.0	15.3	41.5	4.5	4.1
Northern	100.0	17.6	39.4	4.6	4.0
Southern	100.0	13.9	43.7	3.6	5.7
Western	100.0	18.3	35.1	6.8	4.0

Table 14.16 Distribution of population by cause of main type of disability and selected characteristics (Continued)

Selected characteristics	Other accident	War	Natural ageing	Other	Not Stated
Total	8.8	4.1	8.1	10.5	2.8
Male	10.1	5.0	6.1	10.0	2.7
Female	7.2	3.0	10.5	11.0	3.0
Broad Age					
Total	8.8	4.1	8.1	10.5	2.8
0 - 14	8.5	0.8	0.0	12.8	5.1
15 - 35	9.1	3.9	0.0	13.4	3.1
36 - 60	9.7	6.5	6.2	10.2	2.1
60+	7.3	3.7	28.3	5.1	1.6
Place of residence					
Total	8.8	4.1	8.1	10.5	2.8
Rural	8.6	4.3	8.5	10.2	2.4
Urban	9.1	3.7	7.5	11.0	3.6
Region					
Total	8.8	4.1	8.1	10.5	2.8
Eastern	8.5	6.0	6.4	10.7	3.0
Northern	9.3	3.0	9.8	10.1	2.2
Southern	7.7	4.0	8.5	10.2	2.7
Western	9.8	3.3	6.8	11.4	4.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.4.9 Cause of disability by district

The distribution of PWDs by cause of main type of disability by district of residence, as presented in Table 14.17, revealed a similar trend to Table 14.16 above. All districts confirmed that disease/ illness was the major cause of main type of disability followed by congenital birth. Natural ageing as a cause of disability was mainly reported in Kambia (15.5 per cent) followed by Port Loko (11.5 per cent). Appendix Table A14.3 presents the distribution of the PWDs by region, district, chiefdom and main cause of disability.

Table 14.17 Distribution of persons with disabilities by cause of main type of disability and district

District	Total		Congenital from birth	Disease/ illness	Transport accident	Occupational injury
Total	93,129	100.0	16.2	40.5	4.6	4.5
Kailahun	9,666	100.0	15.9	41.2	4.1	4.1
Kenema	9,155	100.0	15.5	39.5	4.7	4.8
Kono	6,756	100.0	14.1	44.6	4.8	3.1
Bombali	8,797	100.0	18.8	40.1	3.8	3.5
Kambia	4,489	100.0	15.3	37.7	5.0	4.4
Koinadugu	4,125	100.0	16.3	43.2	4.3	4.0
Port Loko	9,050	100.0	19.4	36.4	4.9	3.9
Tonkolili	6,388	100.0	15.6	41.3	5.2	4.9
Bo	9,335	100.0	14.4	44.0	3.6	5.2
Bonthe	2,726	100.0	14.9	43.7	2.9	5.1
Moyamba	5,866	100.0	13.0	43.1	3.5	7.2
Pujehun	4,843	100.0	13.8	44.0	4.1	5.2
Western- Rural	4,126	100.0	16.9	37.3	6.9	4.4
Western- Urban	7,807	100.0	19.1	33.9	6.7	3.8

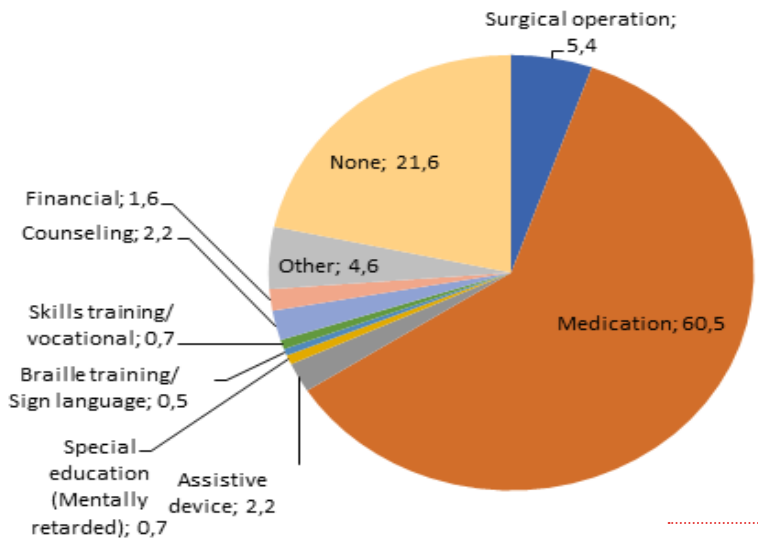
District	Other accident	War	Natural ageing	Other	Not Stated
Total	8.8	4.1	8.1	10.5	2.8
Kailahun	8.6	6.6	7.3	10.1	2.0
Kenema	7.4	6.1	7.1	11.3	3.6
Kono	9.7	5.2	4.1	10.8	3.5
Bombali	8.6	2.9	9.0	10.7	2.5
Kambia	9.2	1.5	15.5	10.3	1.2
Koinadugu	9.0	3.5	8.5	9.4	1.9
Port Loko	9.9	3.0	11.5	8.7	2.3
Tonkolili	9.9	3.9	5.3	11.7	2.3
Bo	8.4	3.7	7.8	10.1	2.8
Bonthe	7.4	4.0	9.1	10.2	2.9
Moyamba	7.2	2.9	9.5	10.8	2.9
Pujehun	7.3	5.7	8.0	9.7	2.1
Western- Rural	10.0	4.9	4.3	11.2	4.1
Western- Urban	9.7	2.5	8.1	11.5	4.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.4.10 Type of disability by kind of treatment

Information was collected from the respondents on the kind of treatment and assistance PWD had received (Figure 14.5). The findings revealed that the majority had received medication forming 60.5 per cent. Other important forms of treatment and support reported were surgical operation, assistive device, counselling and financial support. It should be noted that 21.6 per cent of PWD had not been assisted in any way.

Figure 14.5 Treatment and support for the persons with disability (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 14.18 presents the distribution of PWD by main type of disability and the kind of treatment received. The majority of beneficiaries for surgical operation, medication, assistive devices, skills training, counselling and financial support were people with physical disabilities.

Table 14.18 Distribution of the population by main type of disability and type of treatment or rehabilitation for disability

Main disability	Total	Surgical operation	Medication	Assistive devices	Special education (mentally retarded)	Braille training/ Sign language
Number	93,129	5,012	56,297	2,065	681	504
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Physical disability (Polio)	21.8	22.9	21.7	33.6	10.9	7.7
Physical disability (Amputee)	8.9	17.0	7.7	10.3	4.6	3.4
Blind or visually impaired	12.5	16.8	13.2	11.8	7.3	10.7
Partially sighted	15.2	17.5	16.8	15.4	3.5	2.8
Deaf	6.8	2.8	6.8	4.8	6.8	15.7
Partially deaf	5.1	1.9	5.1	3.1	2.8	4.0
Speech difficulties	3.9	2.3	2.6	3.4	7.0	15.1
Mute	3.5	1.6	2.2	2.2	6.8	33.1
Mental difficulties	4.7	1.7	3.9	3.3	42.6	1.8
Spinal injury/disability	3.1	3.9	3.7	2.4	1.2	0.2
Psychiatric disability	1.4	1.5	1.4	1.5	2.3	0.6
Epileptic	2.4	0.6	3.0	1.7	1.5	0.4
Rheumatism	1.7	0.6	2.2	1.5	0.1	0.4
Albinism	0.5	0.4	0.3	0.4	0.4	0.2
Kyphoscoliosis (Hunch back)	0.7	1.1	0.6	0.7	0.3	3.4
Other	7.7	7.6	8.8	4.0	1.9	0.6

Table 14.18 Distribution of the population by main type of disability and type of treatment or rehabilitation for disability (continued)

Main disability	Skills training	Counselling	Financial	Other	None
Number	641	2,065	1,479	4,303	20,082
Percent	100.0	100.0	100.0	100.0	100.0
Physical disability (Polio)	38.5	25.1	22.0	23.2	20.2
Physical disability (Amputee)	12.0	9.3	9.1	6.6	10.7
Blind or visually impaired	6.6	13.2	13.5	7.4	11.0
Partially sighted	2.8	7.6	13.6	9.1	13.6
Deaf	7.2	6.5	6.8	6.9	7.7
Partially deaf	2.2	4.1	3.6	4.8	6.5
Speech difficulties	4.4	6.9	3.7	4.9	6.8
Mute	8.0	4.9	3.2	4.4	6.4
Mental difficulties	2.3	9.8	5.5	8.7	5.2
Spinal injury/disability	3.4	1.9	5.7	2.3	1.5
Psychiatric disability	2.0	2.2	2.5	1.8	0.9
Epileptic	1.9	1.7	2.2	3.2	1.5
Rheumatism	1.2	1.2	1.4	1.4	0.8
Albinism	0.5	1.4	0.6	0.7	1.1
Kyphoscoliosis (Hunch back)	2.2	0.9	1.0	0.9	0.8
Other	4.8	3.2	5.8	13.7	5.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.5 Socio-economic characteristics of persons with disabilities

The analysis of socio-economic characteristics of PWDs was carried out to understand their welfare status. The key variables considered in the analysis were; educational levels, literacy levels, marital status, activity status, type of dwelling, tenure status, source of drinking water, and type of toilet facility used by the household members.

It is important to analyse the data since PWDs are likely to face more social and economic hardships than their non-PWDs counterparts. The social and physical barriers combined with the stigma of disability constrain PWDs' ability to earn, which in turn limits access to the basic necessities of life. According to the WHO report on disability (2011), half of PWDs cannot afford health care, compared to only one third of non-PWDs.

14.5.1 Literacy of persons with disabilities 10 years and older by region

The distribution of PWDs aged 10 years and above by cause of main type of disability and literacy status is presented in Table 14.19. Only 32.7 per cent of PWDs were literate at the time of the census enumeration. The literacy status varied by cause of disability, with those reporting transport accident as the main cause of disability registering the highest literacy levels (47.4 per cent), while those reporting natural ageing process revealed the lowest literacy levels (18 per cent). The findings suggest variations in the disability experiences. It is likely that the PWDs who suffered a transport accident became disabled when they were already literate.

The census questionnaire included a question which was administered to all persons aged 10 years and above, to access the literacy levels and the languages in which the respondent was fluent. Close to one quarter of the PWDs aged 10 years and over could write and speak English. The other languages with significant proportions were; Arabic (4.2 per cent) and local languages (2.4 per cent). The knowledge of English varied from 9.1 per cent for the PWDs who reported the cause as natural ageing process to 36.6 per cent for those whose cause of disability was transport accident.

Table 14.19 Distribution of the population aged 10 years and above by cause of main type of disability and literacy status

Literacy status	Total	Congenital (from birth)	Disease/ illness	Transport accident	Occupational injury
Literacy					
Total	100.0	100.0	100.0	100.0	100.0
Literate	32.7	35.4	30.4	47.4	32.6
Not literate	66.8	64.2	69.1	52.1	67.1
Dont know	0.5	0.4	0.5	0.5	0.3
Literacy levels					
Total	100.0	100.0	100.0	100.0	100.0
Local language only	2.4	2.3	2.3	3.4	2.4
English only	24.5	28.4	23.0	36.6	21.3
Local language and English only	0.6	0.7	0.5	0.9	0.8
French only	0.3	0.3	0.2	0.4	0.2
Local language and French only	0.0	0.0	0.0	0.0	0.0
English and French only	0.1	0.1	0.1	0.1	0.1
Local language English and French only	0.0	0.0	0.0	0.0	0.0
Arabic only	4.2	3.0	3.8	5.3	7.3
Local language and Arabic only	0.0	0.0	0.0	0.1	0.1
English and Arabic only	0.1	0.1	0.1	0.2	0.1
Local language English and Arabic only	0.0	0.1	0.0	0.0	0.0
Other languages	0.3	0.4	0.3	0.3	0.2
Not literate	66.8	64.2	69.1	52.1	67.1
Dont know	0.5	0.4	0.5	0.5	0.3

Table 14.19 Distribution of the population aged 10 years and above by cause of main type of disability and literacy status (continued)

Literacy status	Other accident	War	Natural ageing	Other	Not stated
Literacy					
Total	100.0	100.0	100.0	100.0	100.0
Literate	38.5	35.8	18.0	35.0	43.3
Not literate	61.0	63.8	81.0	64.3	56.1
Dont know	0.5	0.4	1.0	0.7	0.5
Literacy levels					
Total	100.0	100.0	100.0	100.0	100.0
Local language only	2.0	3.2	1.9	2.8	2.9
English only	30.1	25.3	9.1	27.4	34.4
Local language and English only	0.6	0.5	0.4	0.6	1.0
French only	0.2	0.3	0.1	0.3	0.3
Local language and French only	0.0	0.0	0.0	0.0	0.1
English and French only	0.1	0.1	0.1	0.0	0.1
Local language English and French only	0.0	0.0	0.0	0.0	0.0
Arabic only	4.6	5.8	5.9	3.4	3.5
Local language and Arabic only	0.1	0.0	0.0	0.0	0.1
English and Arabic only	0.2	0.2	0.1	0.2	0.1
Local language English and Arabic only	0.0	0.0	0.0	0.0	0.1
Other languages	0.5	0.5	0.3	0.3	0.6
Not literate	61.0	63.8	81.0	64.3	56.1
Dont know	0.5	0.4	1.0	0.7	0.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The Western Region presented the highest literacy levels (58.2 per cent) of PWDs aged 10 and older, while the Northern Region showed the lowest literacy levels (28 per cent) (Table 14.20). Across the regions, the male literacy levels were higher than their female counterparts. The proportion of the male literate PWDs varied from 37.6 per cent in the Northern Region to 66.8 per cent in the Western Region. A similar trend was noted for the females with 17.5 and 47.5 per cent for the Northern and Western region, respectively.

Table 14.20 Distribution of the persons with disabilities aged 10 years and older by literacy status, region and sex

Region/Sex	Total Number	Percent	Literate	Not Literate	Don't Know
Total Country					
Total	83,292	100.0	32.7	66.8	0.5
Male	44,759	100.0	41.9	57.6	0.5
Female	38,533	100.0	21.9	77.5	0.6
Eastern					
Total	22,797	100.0	29.9	69.6	0.5
Male	12,589	100.0	38.2	61.2	0.5
Female	10,208	100.0	19.6	79.9	0.5
Northern					
Total	29,239	100.0	28.0	71.3	0.7
Male	15,292	100.0	37.6	61.8	0.6
Female	13,947	100.0	17.5	81.7	0.8
Southern					
Total	20,411	100.0	28.8	70.9	0.4
Male	10,870	100.0	38.5	61.2	0.4
Female	9,541	100.0	17.7	81.9	0.4
Western					
Total	10,845	100.0	58.2	41.2	0.6
Male	6,008	100.0	66.8	32.7	0.5
Female	4,837	100.0	47.5	51.8	0.7

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The literacy levels of the PWDs aged 10 to 24 years by region and sex is presented in Table 14.21. The majority of the literate PWDs were knowledgeable in the English language forming 43.5 per cent of the total PWDs. Overall, the knowledge of English varied from 36.3 per cent in the Southern Region to 62.7 per cent in the Western Region. A similar trend was noted when the analysis on knowledge of English was carried out by sex.

Table 14.21 Literacy levels of persons with disabilities aged 10-24 by region and sex

Region/Sex	Total Number	Percent	Local language only	English only	Local language and English only
Total Country					
Total	19,298	100.0	2.1	43.5	0.8
Male	10,574	100.0	2.1	46.6	0.9
Female	8,724	100.0	2.2	39.8	0.8
Eastern					
Total	5,536	100.0	2.2	41.2	0.4
Male	3,025	100.0	2.3	44.1	0.4
Female	2,511	100.0	2.2	37.8	0.3
Northern					
Total	6,817	100.0	1.7	41.8	1.0
Male	3,726	100.0	1.7	45.7	1.0
Female	3,091	100.0	1.8	37.1	0.9
Southern					
Total	4,114	100.0	2.4	36.3	1.0
Male	2,266	100.0	2.5	37.9	1.2
Female	1,848	100.0	2.2	34.3	0.8
Western					
Total	2,831	100.0	2.4	62.7	1.1
Male	1,557	100.0	2.0	66.2	0.9
Female	1,274	100.0	2.9	58.5	1.3

Table 14.21 Literacy levels of persons with disabilities aged 10-24 by region and sex (continued)

Region/Sex	French only	Arabic only	Other	Not literate	Don't Know
Total Country					
Total	0.4	1.5	0.7	50.5	0.4
Male	0.4	2.3	0.8	46.6	0.5
Female	0.3	0.6	0.7	55.2	0.4
Eastern					
Total	0.3	1.4	0.7	53.5	0.4
Male	0.3	2.0	0.9	49.7	0.3
Female	0.3	0.6	0.3	58.1	0.4
Northern					
Total	0.3	1.1	0.6	52.9	0.5
Male	0.3	1.5	0.7	48.6	0.6
Female	0.4	0.7	0.6	58.1	0.5
Southern					
Total	0.4	2.7	0.7	56.3	0.3
Male	0.4	4.5	0.4	52.6	0.4
Female	0.3	0.5	1.0	60.8	0.2
Western					
Total	0.6	0.9	1.2	30.6	0.6
Male	0.8	1.3	1.2	27.1	0.6
Female	0.5	0.4	1.1	34.8	0.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.5.2 Level of education of persons with disabilities, three years and older by region

Table 14.22 presents the distribution of the PWDs aged three years and above by highest educational level attained, region and sex. The findings show that 62.8 per cent of the total PWDs had never been to school. Among the males, 55.4 per cent had no education. The corresponding figure for the females is 71.4 per cent. Overall, 15.9 per cent of the PWDs had completed primary level of education. The PWDs who had studied beyond the primary level constituted 17.4 per cent of the total population of the PWDs. At the regional level, the Western Region had the lowest proportion (38.3 per cent) of PWDS with no education, followed by the Eastern Region (63.4 per cent). The Northern Region presents the highest proportion (68.6 per cent) of PWDs who had never gone to school at the time of the census enumeration.

Further analysis by region and gender shows that, the proportion of the female PWDs with no education varied from 47.2 per cent in the Western Region to 77.1 per cent in the Northern Region. The corresponding percentages for the male PWDs were 32.1 and 61.1 for Western and Northern regions respectively. Generally, the male PWDs had higher percentages at every level of education than those of their female counterparts.

Table 14.22 Distribution of persons with disabilities aged 3 years and above by highest educational level attained, region and sex

Region/Sex	Number	Percent	No education	Kinder garten	Primary	JSS	SSS
Total Country							
Total	92,076	100.0	62.8	2.2	15.9	8.0	6.4
Male	49,713	100.0	55.4	2.3	17.0	9.5	8.6
Female	42,363	100.0	71.4	2.0	14.7	6.2	3.7
Eastern							
Total	25,332	100.0	63.4	2.4	16.7	8.1	5.6
Male	14,008	100.0	56.3	2.4	17.8	9.9	7.8
Female	11,324	100.0	72.3	2.4	15.4	5.8	2.9
Northern							
Total	32,477	100.0	68.6	1.9	14.8	6.5	4.3
Male	17,141	100.0	61.1	2.2	16.3	7.8	6.3
Female	15,336	100.0	77.1	1.5	13.1	5.0	2.1
Southern							
Total	22,471	100.0	66.1	1.9	15.5	6.9	5.1
Male	12,024	100.0	59.0	2.0	16.5	8.3	7.1
Female	10,447	100.0	74.2	1.7	14.4	5.3	2.7
Western							
Total	11,796	100.0	38.8	3.1	18.3	13.9	16.1
Male	6,540	100.0	32.1	3.1	17.9	14.9	19.4
Female	5,256	100.0	47.2	3.1	18.7	12.6	11.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 14.22 Distribution of persons with disabilities aged 3 years and above by highest educational level attained, region and sex (continued)

Region/Sex	Vocational/ technical/ nursing/ Teacher	Higher (First degree)	Tertiary (Post-graduate) & PHD	Koranic	Other	Don't know
Total Country						
Total	1.9	0.8	0.3	1.6	0.2	0.1
Male	2.6	1.1	0.5	2.7	0.2	0.1
Female	1.1	0.3	0.1	0.2	0.1	0.1
Eastern						
Total	1.6	0.4	0.2	1.4	0.1	0.0
Male	2.3	0.7	0.3	2.3	0.1	0.0
Female	0.7	0.1	0.1	0.2	0.0	0.0
Northern						
Total	1.5	0.3	0.1	1.8	0.1	0.0
Male	2.2	0.6	0.3	3.1	0.1	0.0
Female	0.8	0.1	0.0	0.3	0.0	0.0
Southern						
Total	1.7	0.6	0.2	1.9	0.2	0.1
Male	2.3	0.9	0.3	3.4	0.2	0.1
Female	1.0	0.2	0.1	0.2	0.1	0.1
Western						
Total	4.0	2.9	1.2	0.8	0.6	0.3
Male	4.6	3.9	1.5	1.4	0.8	0.3
Female	3.2	1.6	0.8	0.2	0.5	0.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.5.3 Level of education of persons with disabilities, three years and older by type of disability

The distribution of the PWDs aged three years and older by type of disability and highest level of educational attainment is presented in Table 14.23. Irrespective of the type of disability, the majority of PWDs had never been to school. The PWDs with mute condition (76.6 per cent) presented the biggest proportion of PWDs who had never been to school. On the other hand, the PWDs with hunch back (48.9 per cent) condition presented the lowest proportion. The proportion of PWDs who had attained primary school education as the highest level of education varied from 8.8 per cent for the blind or visually impaired to 23 per cent for the partially deaf.

Table 14.23 Distribution of persons with disabilities aged 3 years and older by type of disability and highest level of education

Type of Disability	Number	Percent	No education	Kinder garten	Primary	JSS	SSS
Total	92,076	100.0	62.8	2.2	15.9	8.0	6.4
Physical disability (Polio)	19,985	100.0	53.2	2.7	19.0	10.6	8.9
Physical disability (Amputee)	8,114	100.0	53.8	2.9	18.0	10.5	8.9
Blind or visually impaired	11,599	100.0	74.3	1.6	8.8	5.1	5.1
Partially sighted	14,115	100.0	67.9	1.4	12.7	6.7	5.7
Deaf	6,240	100.0	66.9	2.4	17.9	6.9	3.3
Partially deaf	4,706	100.0	59.9	2.0	23.0	7.8	4.5
Speech difficulties	3,572	100.0	63.5	2.6	19.1	6.9	4.5
Mute	3,221	100.0	76.6	2.6	13.7	3.5	2.2
Mental difficulties	4,354	100.0	68.9	2.6	11.9	7.0	6.5
Spinal injury/ disability	2,845	100.0	61.0	2.2	14.9	10.1	6.1
Psychiatric disability	1,268	100.0	61.4	1.6	17.4	7.6	6.8
Epileptic	2,240	100.0	63.0	2.2	21.1	6.7	4.1
Rheumatism	1,552	100.0	72.9	1.4	10.5	6.4	3.9
Albinism	476	100.0	53.4	3.4	22.5	9.0	6.3
Kyphoscoli-osis (Hunch Back)	660	100.0	48.9	4.2	20.9	11.5	10.8
Other	7,129	100.0	59.4	1.6	17.6	8.7	7.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 14.23 Distribution of persons with disabilities aged 3 years and older by type of disability and highest level of education (continued)

Type of Disability	Vocational/ technical	Higher (First degree)	Tertiary	Koranic	Other	Don't Know
Total	1.9	0.8	0.3	1.6	0.2	0.1
Physical disability (Polio)	2.8	1.1	0.5	1.2	0.2	0.1
Physical disability (Amputee)	2.4	1.2	0.4	1.6	0.2	0.0
Blind or visually impaired	1.9	0.7	0.4	1.9	0.2	0.0
Partially sighted	1.8	0.6	0.2	2.6	0.2	0.1
Deaf	1.1	0.4	0.1	0.9	0.1	0.0
Partially deaf	0.8	0.4	0.0	1.6	0.1	0.0
Speech difficulties	1.3	0.7	0.3	0.8	0.1	0.2
Mute	0.9	0.1	0.1	0.1	0.2	0.1
Mental difficulties	1.1	0.7	0.3	0.8	0.1	0.1
Spinal injury/ disability	2.2	0.8	0.3	2.1	0.2	0.1
Psychiatric disability	1.5	1.1	0.2	1.8	0.3	0.3
Epileptic	1.1	0.1	0.0	1.4	0.1	0.0
Rheumatism	1.5	0.3	0.3	2.4	0.3	0.1
Albinism	2.9	1.1	0.2	1.1	0.2	0.0
Kyphoscoli-osis (Hunch Back)	1.1	1.5	0.0	1.1	0.0	0.0
Other	1.9	0.7	0.5	2.0	0.3	0.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.5.4 Persons with disabilities and non persons with disabilities aged 6-24 by level of education

Table 14.24 presents the distribution of the PWDs and non-PWDs aged 6 to 24 years by level of education. The findings reveal that irrespective of the disability status, the majority of the population aged 6 to 24 years had completed primary school education. Generally, the proportion of people who had completed any level of education was lower for PWDs than for non-PWDs. There are no clear variations when the analysis was carried out by disability status and sex.

Table 14.24 Distribution of person with disabilities and non person with disabilities aged 6-24 by level of education

Highest educational level	Total			Persons with disability			Persons with no disability		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Number	3,243,231	1,598,069	1,645,162	24,703	13,635	11,068	3,218,528	1,584,434	1,634,094
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kindergarten	3.3	3.4	3.3	3.1	2.9	3.3	3.3	3.4	3.3
Primary	40.9	40.1	41.7	36.2	36.2	36.1	40.9	40.1	41.7
JSS	17.1	17.1	17.0	12.8	13.6	11.7	17.1	17.2	17.1
SSS	11.2	12.5	10.0	7.3	8.6	5.8	11.3	12.6	10.0
Vocational/ Technical/ Nursing/ Teacher	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.7
Higher (First degree)	0.4	0.5	0.4	0.2	0.3	0.2	0.4	0.5	0.4
Tertiary (Post-graduate) & PHD	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Koranic	0.6	1.0	0.2	0.6	1.1	0.1	0.6	1.0	0.2
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Don't know	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not stated	25.6	24.6	26.6	39.1	36.7	42.2	25.5	24.5	26.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.5.5 Marital status of persons with disabilities and non-persons with disabilities 12 years and older

The distribution of the PWDs and non-PWDs aged 10 years and over by marital status is presented in table 14.25 below. Generally, the proportions of male persons aged 10 years and over who were not married at the time of the census enumeration were higher than their female counterparts. The most prominent types of marital status for the PWDs and non-PWDs were never married and married polygamous. The proportion of persons married polygamous was higher for the PWDs than for the non-PWDs.

The PWDs also registered a higher proportion (14.8 per cent) of the persons whose marital status was widowed than those with no disabilities (3.8 per cent). Further analysis by sex showed that the proportion of males (44.1 per cent) in polygamous marriage was higher than that of their female counterparts (26.4 per cent) for the PWDs. The corresponding percentages for the non-PWDs were 29.5 and 30.3 for the males and females, respectively.

Table 14.25 Distribution of the persons with disabilities and non-persons with disabilities aged 10 years and older by marital status

Marital status	Total			Persons with disability			Persons with no disability		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Number	5,030,016	2,455,827	2,574,189	83,292	44,759	38,533	4,946,724	2,411,068	2,535,656
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Never married	45.9	53.1	39.1	27.9	32.9	22.2	46.2	53.5	39.3
Engaged	4.0	3.7	4.4	2.8	2.9	2.7	4.1	3.7	4.4
Married monogamous	13.0	9.8	15.9	12.5	10.3	15.2	13.0	9.8	15.9
Married polygamous	30.0	29.8	30.3	35.9	44.1	26.4	29.9	29.5	30.3
Co-habitation (< 5 years)	0.4	0.4	0.5	0.3	0.2	0.4	0.4	0.4	0.5
Co-habitation (= >5 years)	0.2	0.1	0.2	0.2	0.1	0.3	0.2	0.1	0.2
Separated	1.4	1.2	1.5	3.0	2.9	3.0	1.3	1.2	1.5
Divorced	0.8	0.6	0.9	2.1	2.2	2.0	0.8	0.6	0.9
Widowed	4.0	0.9	7.0	14.8	4.0	27.5	3.8	0.8	6.7
Don't know	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.5.6 Employment status of persons with disabilities 10 years and older

There is a correlation between disabilities and poverty. It is worth noting that jobs offered to PWDs are scarce, yet most adult PWDs have families to take care of. Even the intellectual PWDs experience difficulties finding jobs. For those who do get jobs, keeping them can be difficult. Most potential employers are biased and only concerned about maximising production and effective social participation.

Just over half (55.1 per cent) of PWDs were employed at the time of the census, with 43 per cent not working (inactive) and 1.8 per cent were not employed. Further analysis revealed that 44.1 per cent were self-employed without employees while the self-employed with employees formed 2.6 per cent of the total. There were no major variations in reporting when the analysis was carried out with respect to type of disability.

Table 14.26 Distribution of the population aged 10 years and above by cause of main type of disability and employment status

Employment status/ Economic activity	Total	Congenital (from birth)	Disease/ illness	Transport accident	Occupational injury
Number	83,292	11,744	34,145	4,083	4,032
Percent	100.0	100.0	100.0	100.0	100.0
Paid employee	3.9	3.7	3.5	8.1	4.8
Self-employed without employees	44.1	41.6	44.1	47.5	55.2
Self-employed with employees (employer)	2.6	2.4	2.4	3.5	4.6
Unpaid family worker	3.5	3.8	3.6	3.6	3.7
Paid apprentice	0.3	0.4	0.3	0.6	0.4
Unpaid apprentice	0.7	0.9	0.7	0.9	0.7
Worked before but currently looking for work	0.5	0.3	0.4	1.2	0.8
Looking for work for the first time	1.3	1.4	1.3	1.8	0.8
Household work	8.4	9.9	8.9	6.0	5.1
Not working & not looking for work	16.2	11.9	17.4	10.9	12.4
Full time student	11.0	19.4	10.1	11.1	5.0
Retired/pensioner	2.9	0.7	2.6	2.4	3.6
Other (specify)	3.6	2.8	3.6	2.0	2.3
Don't know	1.0	0.8	1.0	0.6	0.6
Economic Activity					
Total	100.0	100.0	100.0	100.0	100.0
Employed Population	55.1	52.7	54.6	64.2	69.4
Unemployed Population	1.8	1.7	1.7	2.9	1.6
Inactive Population	43.1	45.6	43.6	32.9	29.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 14.26 Distribution of the population aged 10 years and above by cause of main type of disability and employment status (continued)

Employment status/ Economic activity	Other accident	War	Natural ageing	Other	Not stated
Number	7,432	3,772	7,589	8,480	2,015
Percent	100.0	100.0	100.0	100.0	100.0
Paid employee	4.1	4.7	2.2	4.0	5.3
Self-employed without employees	47.5	54.5	31.1	44.9	43.6
Self-employed with employees (employer)	2.4	3.8	2.2	2.6	2.9
Unpaid family worker	3.7	3.2	2.5	3.2	3.1
Paid apprentice	0.4	0.4	0.1	0.3	0.7
Unpaid apprentice	0.8	0.4	0.4	0.6	0.9
Worked before but currently looking for work	0.4	0.6	0.3	0.4	0.4
Looking for work for the first time	1.6	1.6	0.5	1.6	1.5
Household work	6.9	6.8	9.8	8.5	7.1
Not working & not looking for work	12.0	12.6	32.5	14.0	10.1
Full time student	14.3	5.5	0.2	12.8	18.3
Retired/pensioner	2.3	1.9	11.3	1.2	1.9
Other (specify)	2.8	3.3	5.4	4.7	3.4
Don't know	0.6	0.9	1.6	1.2	0.8
Economic Activity					
Total	100.0	100.0	100.0	100.0	100.0
Employed Population	59.0	67.0	38.4	55.5	56.5
Unemployed Population	2.0	2.1	0.8	2.0	2.0
Inactive Population	39.0	30.9	60.8	42.5	41.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.5.7 Employment status of persons with disability by sex

Generally, the majority of persons aged 15 years and over reported that they were in self-employment without employees (Table 14.27). There were no clearly marked differences when the proportion of PWDs in self-employment without employees is compared with the one for persons with no disability. The category of self-employed without employees was more dominant in the rural than urban areas. The three most important categories of the employment status for PWDs are; self-employed without employees, not working and not looking for work, and household work. For non-PWDs, the categories with significant proportions are; self-employed without employees, full time student and household work.

The analysis by sex of the person revealed some differences in the reporting of the employment status. For the category of self-employed without employees for the PWDs, the proportion of the males (49.3 per cent) is higher than that for the females (43.2 per cent), while the reverse is noted for the non-PWDs. Overall, the proportion of the males (6.2 per cent) in paid employment is higher than that of females (1.9 per cent). A similar trend is revealed when the analysis is carried out by place of residence. Irrespective of the disability status and place of residence, the proportions of females in household work are higher than those of their male counterparts.

Table 14.27 Distribution of the population aged 15 years and older by employment status, place of residence, sex and disability status

Employment status/ Economic activity	Total			Persons with disability			Persons with no disability		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Paid employee	6.5	9.8	3.4	4.2	6.2	1.9	6.5	9.9	3.4
Self-employed without employees	48.5	47.1	49.8	46.5	49.3	43.2	48.5	47.1	49.9
Self-employed with employees (employer)	2.8	3.2	2.4	2.8	3.2	2.2	2.8	3.1	2.4
Unpaid family worker	3.0	2.6	3.5	3.5	3.2	3.8	3.0	2.6	3.5
Paid apprentice	0.4	0.6	0.2	0.4	0.5	0.2	0.4	0.6	0.2
Unpaid apprentice	0.8	1.2	0.5	0.7	0.9	0.5	0.8	1.2	0.5
Worked before but currently looking for work	0.5	0.8	0.3	0.5	0.7	0.2	0.5	0.8	0.3
Looking for work for the first time	2.2	2.7	1.6	1.4	1.7	1.1	2.2	2.8	1.6
Household work	7.3	2.1	12.2	8.5	3.0	14.7	7.3	2.0	12.2
Not working & not looking for work	4.5	3.7	5.3	16.8	15.0	18.8	4.3	3.5	5.0
Full time student	21.3	24.0	18.7	7.1	8.4	5.6	21.5	24.3	18.9
Retired/ pensioner	0.6	0.7	0.5	3.2	3.5	2.8	0.6	0.6	0.5
Other (specify)	1.2	1.2	1.3	3.6	3.3	4.0	1.2	1.1	1.2
Don't know	0.4	0.4	0.5	1.0	0.9	1.1	0.4	0.4	0.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 14.27 Distribution of the population aged 15 years and older by employment status, place of residence, sex and disability status (continued)

Employment status/ Economic activity	Total			Persons with disability			Persons with no disability		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Rural									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Paid employee	2.6	4.2	1.2	2.2	3.4	1.0	2.6	4.2	1.2
Self-employed without employees	60.1	60.1	60.1	53.6	57.7	48.8	60.3	60.1	60.4
Self-employed with employees (employer)	2.9	3.1	2.7	3.0	3.4	2.5	2.9	3.1	2.7
Unpaid family worker	4.6	4.0	5.1	4.5	4.2	4.9	4.6	4.0	5.1
Paid apprentice	0.2	0.3	0.1	0.2	0.3	0.2	0.2	0.3	0.1
Unpaid apprentice	0.7	0.9	0.6	0.6	0.7	0.5	0.7	0.9	0.6
Worked before but currently looking for work	0.2	0.3	0.1	0.2	0.3	0.1	0.2	0.3	0.1
Looking for work for the first time	1.0	1.3	0.8	0.8	0.9	0.6	1.0	1.3	0.8
Household work	6.7	2.2	10.7	7.4	2.7	12.9	6.7	2.2	10.7
Not working & not looking for work	3.6	3.0	4.1	16.1	14.3	18.2	3.3	2.7	3.8
Full time student	15.9	19.2	12.9	4.9	6.0	3.6	16.1	19.5	13.1
Retired/pensioner	0.3	0.3	0.4	2.4	2.5	2.3	0.3	0.3	0.3
Other (specify)	0.8	0.8	0.8	3.1	2.8	3.5	0.8	0.8	0.8
Don't know	0.3	0.3	0.3	1.0	0.9	1.1	0.3	0.3	0.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 14.27 Distribution of the population aged 15 years and older by employment status, place of residence, sex and disability status (continued)

Employment Status / Place of residence	Total			Persons with disability			Persons with no disability		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Urban									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Paid employee	11.4	16.6	6.3	8.1	11.8	3.7	11.5	16.7	6.3
Self-employed without employees	33.7	31.5	35.9	32.3	32.6	32.0	33.7	31.5	35.9
Self-employed with employees (employer)	2.6	3.2	2.0	2.4	3.0	1.7	2.6	3.2	2.0
Unpaid family worker	1.1	0.9	1.2	1.4	1.2	1.6	1.0	0.9	1.2
Paid apprentice	0.6	1.0	0.2	0.7	1.1	0.3	0.6	1.0	0.2
Unpaid apprentice	1.0	1.5	0.4	1.0	1.4	0.4	1.0	1.5	0.4
Worked before but currently looking for work	0.9	1.4	0.5	1.0	1.5	0.5	0.9	1.3	0.5
Looking for work for the first time	3.7	4.5	2.8	2.5	3.1	1.9	3.7	4.5	2.8
Household work	8.1	1.9	14.2	10.5	3.6	18.5	8.0	1.8	14.2
Not working & not looking for work	5.7	4.5	6.8	18.1	16.5	20.0	5.5	4.3	6.6
Full time student	28.1	29.8	26.4	11.6	13.4	9.5	28.3	30.1	26.6
Retired/ pensioner	0.9	1.1	0.7	4.7	5.6	3.7	0.9	1.1	0.7
Other (specify)	1.7	1.6	1.8	4.6	4.4	4.9	1.7	1.6	1.8
Don't know	0.5	0.4	0.6	1.0	0.8	1.3	0.5	0.4	0.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.5.8 Persons with disabilities 15 years and older by type of dwelling unit and region

The most common types of dwelling units for PWDs were: separate house, flat/apartment, compound house, and semi-detached house in that order (Table 14.28). The analysis by region of residence of PWDs revealed a similar trend to that of the overall for the Eastern, Northern and Southern regions. The most common type of dwelling for the PWDs in the Western Region were: flat/apartment, separate houses, compound houses, and semi-detached houses. The Western Region (9.3 per cent) revealed a higher proportion of PWDs in improvised home (kiosk container board pan-body) than any other region. It is worth noting that the Western Region also presented a higher proportion (1.6 per cent) of PWDs living in uncompleted houses than any other region.

Table 14.28 Distribution of persons with disabilities aged 15 years and older by type of dwelling unit, region and sex

Type of dwelling	All regions			Eastern			Northern		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Separate house	62.1	62.1	62.2	68.8	68.4	69.5	63.0	62.8	63.2
Semi-detached house	5.5	5.6	5.4	5.2	5.3	5.1	4.6	4.7	4.5
Flat/apartment	17.5	17.4	17.7	13.5	13.8	13.1	18.0	17.8	18.2
Compound house (rooms)	7.8	7.7	7.8	7.6	7.7	7.5	6.4	6.3	6.4
Huts/buildings (same compound)	2.7	2.7	2.6	1.9	1.8	1.9	3.5	3.8	3.2
Huts/buildings (different compound)	1.6	1.7	1.6	1.5	1.5	1.5	2.3	2.4	2.2
Tent	0.8	0.8	0.9	0.6	0.6	0.6	1.4	1.3	1.5
Improvised home (kiosk container board pan-body)	1.2	1.3	1.0	0.3	0.3	0.2	0.3	0.4	0.3
Uncompleted building	0.5	0.6	0.5	0.4	0.4	0.3	0.4	0.4	0.4
Other	0.2	0.1	0.2	0.3	0.2	0.4	0.1	0.1	0.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 14.28 Distribution of persons with disabilities aged 15 years and older by type of dwelling unit, region and sex (continued)

Type of dwelling	Southern			Western		
	Total	Male	Female	Total	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0
Separate house	63.2	66.6	67.5	27.2	27.1	27.5
Semi-detached house	4.5	4.8	4.6	11.1	11.5	10.5
Flat/apartment	18.2	16.6	16.0	30.7	30.9	30.5
Compound house (rooms)	6.4	6.6	6.5	16.2	15.6	17.2
Huts/buildings (same compound)	3.2	2.5	2.4	2.8	2.8	2.7
Huts/buildings (different compound)	2.2	1.4	1.5	0.4	0.3	0.6
Tent	1.5	0.6	0.7	0.4	0.3	0.5
Improvised home (kiosk container board pan-body)	0.3	0.3	0.3	9.3	9.7	8.6
Uncompleted building	0.4	0.5	0.5	1.6	1.6	1.7
Other	0.1	0.2	0.2	0.2	0.2	0.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.5.9 Persons with disabilities 15 years and older by type of tenure status and region

The majority of PWDs were living in owner constructed dwelling units (56.4 per cent), followed by owner inherited (24.4 per cent) and renting private (10.8 per cent) (see Table 14.29). There are no major differences in reporting when gender is taken into consideration. The trend in the reporting of the tenure status for Eastern, Northern and Southern regions was similar to that of the overall. The majority of PWDs in the Western Region were enumerated in private renting facilities forming 35.9 per cent of the total, followed by owner constructed (31.1 per cent) and owner inherited (16.4 per cent). There were no clear differences when comparisons are carried out by the sex of PWD and region of residence.

Table 14.29 Distribution of persons with disabilities aged 15 years and older by type of tenure status and region

	All regions			Eastern			Northern		
Tenure Status	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	77,021	41,271	35,750	20,886	11,521	9,365	26,988	14,044	12,944
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OWNER									
Purchased	1.8	1.9	1.8	1.1	1.2	1.1	1.5	1.4	1.5
Constructed	56.4	57.1	55.6	58.8	59.5	57.9	63.2	64.5	61.8
Inherited	24.4	23.1	25.9	24.9	23.7	26.3	23.7	22.1	25.4
EMPLOYER PROVIDED									
Government	0.8	0.9	0.7	0.8	0.8	0.7	0.6	0.7	0.6
Private	0.5	0.6	0.5	0.6	0.6	0.5	0.4	0.4	0.4
Parastatal/ Quasi-Government	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
RENTING									
Government	0.6	0.6	0.4	0.3	0.4	0.2	0.4	0.5	0.4
Housing Corporation	1.3	1.4	1.2	1.6	1.6	1.5	1.2	1.3	1.0
Private	10.8	11.1	10.4	9.2	9.4	9.0	5.7	5.8	5.5
Parastatal/ Quasi-Government	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
OTHER									
Squatter	0.7	0.7	0.6	0.3	0.4	0.3	0.8	0.9	0.7
Other	2.6	2.5	2.6	2.3	2.2	2.4	2.4	2.2	2.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 14.29 Distribution of persons with disabilities aged 15 years and older by type of tenure status and region (continued)

Tenure Status	Southern			Western		
	Total	Male	Female	Total	Male	Female
Total	19,113	10,141	8,972	10,034	5,565	4,469
	100.0	100.0	100.0	100.0	100.0	100.0
OWNER						
Purchased	1.8	1.8	1.7	4.3	4.5	4.1
Constructed	57.5	58.5	56.3	31.1	30.5	31.8
Inherited	29.1	27.7	30.6	16.4	15.9	17.1
EMPLOYER PROVIDED						
Government	0.8	0.9	0.7	1.2	1.4	0.9
Private	0.3	0.4	0.3	1.2	1.4	1.0
Parastatal/ Quasi-Government	0.1	0.1	0.1	0.1	0.3	0.0
RENTING						
Government	0.3	0.3	0.2	1.9	2.1	1.7
Housing Corporation	0.8	0.8	0.8	2.2	2.4	2.1
Private	6.5	6.7	6.3	35.9	35.9	36.0
Parastatal/ Quasi-Govern-ment	0.0	0.0	0.0	0.2	0.2	0.3
OTHER						
Squatter	0.6	0.6	0.6	1.1	1.1	1.1
Other	2.2	2.1	2.4	4.1	4.3	3.9

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.5.10 Employed people with disabilities 15 years and older by employer and type of dwelling

The distribution of the employed PWDs aged 15 years and older by employer and type of dwelling is presented in Table 14.30. The findings reveal that irrespective of the main employer, the common type of dwelling unit is separate house. The proportion of PWDs in separate houses varied from 38.5 per cent for those employed by private enterprises to 63.9 per cent for those who reported family member as the main employer. The proportion of the PWDs staying in flat/ apartment was higher for those who reported their main employer as government (26.8 per cent) followed by those who were being employed by private enterprises (25.4 per cent) at the time of the census enumeration.

Table 14.30 Distribution of employed persons with disabilities aged 15 years and older by main employer and type of dwelling unit

Type of dwelling unit		Main employer				
	Total	Government	Self employed	Family member	Private enterprises	Others
Number	44,675	1,890	39,019	1,948	972	846
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Separate house	62.1	47.5	63.6	63.9	38.5	48.6
Semi-detached house	5.5	8.4	5.2	6.0	8.5	5.7
Flat/Apartment	17.5	26.8	17.0	12.4	25.4	25.1
Compound house (rooms)	7.8	11.0	7.3	9.8	13.8	12.8
Huts/Buildings (same compound)	2.7	2.3	2.6	3.6	2.4	3.3
Huts/Buildings (different compound)	1.6	0.7	1.7	2.3	0.7	0.4
Tent	0.8	0.7	0.9	0.5	1.1	0.9
Improvised home (kiosk container board pan-body)	1.2	2.2	1.0	1.1	7.5	2.5
Uncompleted building	0.5	0.2	0.5	0.3	1.6	0.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.5.11 Main source of drinking water of persons with disabilities and non-persons with disabilities by sex

The distribution of the population by disability status and main source of drinking water is presented in Table 14.31. The results show that irrespective of the disability status and the gender, the major sources of water were; public tap, protected ordinary well and river, riverbed or stream. Apart from the river, riverbed or stream, the other unsafe water sources were: unprotected ordinary well and unprotected spring. Overall, a higher proportion of PWDs accessing water from unsafe water sources was revealed when a comparison is made with the proportion for non-PWDs. The proportion of PWDs (10.1 per cent) accessing water from mechanical wells was slightly higher than that for the non-PWDs (8.2 per cent).

Table 14.31 Distribution of the population by disability status, sex and main source of drinking

Main source of drinking water	Overall			Persons with disability			Persons with no disability		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Number	7,076,119	3,479,633	3,596,486	93,129	50,319	42,810	6,982,990	3,429,314	3,553,676
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Piped indoors	0.8	0.9	0.8	0.6	0.6	0.6	0.8	0.9	0.8
Piped in compound	3.8	3.9	3.8	2.6	2.7	2.5	3.8	3.9	3.8
Public tap	28.1	28.0	28.3	27.3	27.4	27.3	28.1	28.0	28.3
Protected ordinary well	21.1	21.1	21.1	19.5	19.1	20.0	21.1	21.1	21.2
Protected spring	3.4	3.5	3.4	3.2	3.3	3.1	3.4	3.5	3.4
Unprotected ordinary well	5.4	5.4	5.4	6.0	6.0	6.1	5.4	5.4	5.4
Unprotected spring	3.8	3.9	3.8	4.5	4.7	4.3	3.8	3.8	3.8
Mechanical well	8.2	8.1	8.3	10.1	10.0	10.3	8.2	8.1	8.2
River/river-bed/stream	21.0	21.0	21.0	22.7	22.8	22.6	21.0	21.0	21.0
Neighbour's tap	1.9	1.9	1.9	1.7	1.6	1.7	1.9	1.9	1.9
Sachet/ bottled water	1.9	2.0	1.7	1.2	1.3	1.1	1.9	2.0	1.7
Water vendor/ bowser	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4
Other	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.5.12 Toilet facility used by disability status and sex

Availability of a safe toilet facility is one measure of safe sanitation. The lack of safe sanitary facilities in households and communities is a serious health concern. Table 14.32 presents the distribution of the population by disability status, sex and type of toilet facility used by the household members. The three most common toilet facilities were: community pit, private pit and communal bush or riverbed. The population reporting use of communal pit, irrespective of gender and disability status constituted over 50 per cent. The three common types of toilet facilities formed 87.4 per cent overall. The unsafe sanitary toilet facilities include: use of communal bucket, communal bush or riverbed, communal other, private bucket and private other. Overall, 15.3 per cent of the population were using unsafe toilet facilities. The disaggregation by disability status revealed that the proportion of PWDs (19.2 per cent) using unsafe toilet facilities was higher than that for the non-PWDs (15.3 per cent).

Table 14.32 Distribution of the population by disability status, sex and type of toilet facility

Type of toilet facility	Total			Persons with disability			Persons with no disability		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	7,076,119	3,479,633	3,596,486	93,129	50,319	42,810	6,982,990	3,429,314	3,553,676
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
COMMUNAL									
VIP	1.4	1.4	1.4	1.3	1.3	1.4	1.4	1.4	1.4
Flushed inside	2.6	2.7	2.5	1.7	1.7	1.7	2.6	2.7	2.6
Flushed outside	1.9	1.9	1.9	1.4	1.4	1.5	1.9	2.0	1.9
Pit	52.9	52.7	53.1	50.2	50.3	50.1	52.9	52.8	53.1
Bucket	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Bush/River bed	13.3	13.3	13.3	16.5	16.5	16.6	13.3	13.3	13.3
Other	0.7	0.7	0.7	1.1	1.1	1.1	0.7	0.7	0.7
PRIVATE									
VIP	1.1	1.1	1.1	0.9	0.9	0.9	1.1	1.1	1.1
Flushed inside	2.9	2.9	2.8	1.9	1.9	1.9	2.9	3.0	2.8
Flushed outside	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7
Pit	21.2	21.2	21.3	22.5	22.6	22.4	21.2	21.2	21.2
Bucket	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Other	1.0	1.0	1.0	1.3	1.3	1.4	1.0	1.0	1.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

14.6 Summary, conclusions and recommendations

14.6.1 Summary

The results of the 2015 Census show that PWDs constitute 1.3 per cent of the total population of Sierra Leone. More than two thirds were living in rural areas. The Northern Region had the most PWDs and Western Region had the least. The districts of Bo, Kailahun and Kenema had the highest proportion with three in every ten PWDs enumerated there.

The most common types of disability were: physical disability or polio (21.8 per cent), partially sighted (15.2 per cent), blind or visually impaired (12.5 per cent) and physical disability or amputee (8.9 per cent). Irrespective of type of disability, the findings revealed a correlation between the disability status and the size of household. Most PWDs, irrespective of the type, were living with or had families with more than six persons. This could be attributed to the extra assistance needed by PWDs.

The findings revealed that disease or illness were the major causes of disability followed by congenital from birth. It is worth noting that for people aged over 60 years, natural ageing had a considerable percentage (28.3) as a cause of main type of disability. More males than females reported the cause of their disability as transport accident, occupational injury, other accidents and war. Rural residents were more likely to report disease or illness and war as a cause of disability.

Forty three per cent of PWDs were not working (inactive). The PWDs who were employed at the time of the census constituted 55.1 per cent and those who were not employed formed 1.8 per cent. The majority of PWDs were not literate (66.8 per cent), while 32.7 per cent of the disabled population was literate. The literacy status varied by cause of disability. Those reporting transport accident as the main cause of disability had the highest literacy levels (47.4 per cent), while those reporting natural ageing process revealed the lowest literacy levels (18 per cent).
The Western Region presented the highest literacy levels (58.2 per cent), while the Northern Region showed the lowest literacy levels (28 per cent) for PWDs. Across the regions, the male literacy levels were higher than those of their female counterparts. The proportion of the male literate PWDs varied from 37.6 per cent in the Northern Region to 66.8 per cent in the Western Region.Overall, 15.3 per cent of the population was using unsafe toilet facilities. The disaggregation by disability status revealed that the proportion of PWDs (19.2 per cent) using unsafe toilet facilities is higher than that for the non-PWDs (15.3 per cent).

14.6.2 Conclusion

The 2015 Census has revealed a reduction in the disability rate when compared to 2004. Several disparities were noted when the socio-economic characteristics of the PWDs were compared to those of non-PWDs.

The non-PWDs were performing well on all socio-economic indicators but the inaccessible physical and communication infrastructure always puts PWDs at a disadvantage, while favouring non-PWDs. This is true when all aspects of socio-economic development are considered. The situation is aggravated by the fact that the majority of PWDs were enumerated in the rural areas. Improved accessibility to the physical and communication infrastructure is key to empowering the PWDs to improve their standards of living, be integrated well in their communities, be more productive, and to access basic information. There is a strong correlation between disability and poverty. The barriers to accessing opportunities make it difficult for PWDs to get income, which limits them from accessing education, health care, safe water and safe sanitation.

Among the PWDs, differences were noted from the gender perspective and type of disabilities and residence. Men with disabilities represented higher proportions for employment, education attainment and literacy status than their female counterparts. The lower participation rates in the labour market for female PWDs put them at a disadvantage. Indeed, the female PWDs showed a higher proportion for the employment status category of household work. Furthermore, the PWDs with physical impairment were faring better than those with other disability types on all the socio-economic characteristics.

14.6.3 Recommendations

The Government of Sierra Leone has put in place a number measures to improve the welfare of PWDs. The 1991 Constitution and the Disability Act of 2011 states the rights and privileges of PWDs. The impact of Government efforts is also reflected in the intercensal reduction of the disability rate. However, a lot more works remains to be done to improve the standards of living of PWDs ,as revealed by the analysis of the 2015 Census results.

Medical services should be extended by Government to cover the entire population, given that the main cause of disability was reported as diseases or illness and the common type of disability was physical impairment or polio. Polio immunization should be carried out regularly as advised by the WHO.

The Government should put in place programmes targeting PWDs to improve their living conditions, given that there is a correlation between disabilities and poverty. The PWDs experience challenges to access the job market. Those who manage to get employed face many problems keeping their employment. Business opportunities for PWDs should be created to promote disability inclusion and increased employment opportunities.

The Government should partner with development partners and the Civil Society Organizations to educate all PWDs in order to reduce illiteracy. Children with disabilities are less likely to attend school than other children. These young persons could benefit from formal education systems while adults who are illiterate could be enrolled under the functional adult literacy programmes. Vocational training for PWDs who drop out from school should be enhanced to ensure that they are productive. The disability theme should be mainstreamed in vocational and technical training.

There is a need to put in place a system where Government rewards those companies and organizations that employ or assist PWDs. This could be in terms of tax reduction, tax holidays and certificates of recognition. The rewarding system could identify and reward companies that apply disability inclusive practices. A quota system for PWDs should be implemented in the public service and the private sector employment system. Research on disability should be regularly conducted to inform policy makers and implementers.

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Table A14.1 Distribution of the Population by Chiefdom and Disability Status

Region/ District/ Chiefdom	Total			Disable			Not Disable			Don't Know		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
SierraLeone	7,076,119	3,479,633	3,596,486	93,129	50,319	42,810	6,534,642	3,209,111	3,325,531	448,348	220,203	228,145
EASTERN	1,640,592	813,110	827,482	25,577	14,150	11,427	1,510,797	747,588	763,209	104,218	51,372	52,846
KAILAHUN	525,674	260,060	265,614	9,666	5,194	4,472	497,256	245,584	251,672	18,752	9,282	9,470
Dea	13,263	6,577	6,686	396	208	188	12,445	6,166	6,279	422	203	219
Jawie	50,910	24,903	26,007	1,041	557	484	48,624	23,709	24,915	1,245	637	608
Kissi Kama	20,421	10,201	10,220	470	242	228	19,523	9,741	9,782	428	218	210
Kissi Teng	45,026	22,881	22,145	701	361	340	43,852	22,289	21,563	473	231	242
Kissi Tongi	50,748	25,703	25,045	518	249	269	47,806	24,104	23,702	2,424	1,350	1,074
Kpeje Bongre	25,169	12,026	13,143	375	218	157	24,249	11,542	12,707	545	266	279
Kpeje West	27,544	14,135	13,409	363	194	169	26,587	13,655	12,932	594	286	308
Luawa	80,907	38,540	42,367	2,121	1,165	956	73,692	34,952	38,740	5,094	2,423	2,671
Malema	37,095	18,980	18,115	586	315	271	35,856	18,356	17,500	653	309	344
Mandu	30,984	14,791	16,193	628	363	265	28,245	13,401	14,844	2,111	1,027	1,084
Njaluahun	61,165	30,924	30,241	866	476	390	59,176	29,861	29,315	1,123	587	536
Penguia Upper	26,272	13,193	13,079	519	266	253	24,241	12,149	12,092	1,512	778	734

Region/ District/ Chiefdom	Total			Disable			Not Disable			Don't Know		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Bambara	26,848	12,793	14,055	530	302	228	25,097	11,935	13,162	1,221	556	665
Yawei	29,322	14,413	14,909	552	278	274	27,863	13,724	14,139	907	411	496
KENEMA	609,427	300,755	308,672	9,155	5,163	3,992	559,615	275,800	283,815	40,657	19,792	20,865
Dama	30,751	14,721	16,030	421	248	173	27,925	13,396	14,529	2,405	1,077	1,328
Dodo	22,858	11,738	11,120	303	182	121	22,237	11,396	10,841	318	160	158
Gaura	18,176	8,691	9,485	390	215	175	15,388	7,354	8,034	2,398	1,122	1,276
Gorama Mende	43,349	21,604	21,745	586	350	236	40,644	20,216	20,428	2,119	1,038	1,081
Kandu Lekpeama	18,216	9,267	8,949	352	208	144	17,393	8,825	8,568	471	234	237
Koya	13,482	6,732	6,750	262	149	113	11,975	5,967	6,008	1,245	616	629
Langrama	3,584	1,673	1,911	67	33	34	3,356	1,567	1,789	161	73	88
Lower Bambara	76,259	39,195	37,064	1,219	693	526	72,202	37,048	35,154	2,838	1,454	1,384
Malegohun	20,544	10,195	10,349	456	227	229	17,480	8,677	8,803	2,608	1,291	1,317
Niawa	7,815	3,661	4,154	182	93	89	7,474	3,495	3,979	159	73	86
Nomo	5,491	2,838	2,653	71	38	33	4,671	2,397	2,274	749	403	346
Nongowa	45,562	22,018	23,544	921	521	400	41,442	19,916	21,526	3,199	1,581	1,618
Simbaru	17,397	8,642	8,755	243	136	107	16,677	8,295	8,382	477	211	266
Small Bo	29,498	14,133	15,365	478	263	215	27,165	12,997	14,168	1,855	873	982
Tunkia	36,054	17,848	18,206	564	339	225	33,182	16,423	16,759	2,308	1,086	1,222
Wandor	20,326	10,275	10,051	388	237	151	19,434	9,797	9,637	504	241	263
Kenema City	200,065	97,524	102,541	2,252	1,231	1,021	180,970	88,034	92,936	16,843	8,259	8,584

Table A14.1 Distribution of the Population by Chiefdom and Disability Status

Region/ District/ Chiefdom	Total			Disable			Not Disable			Don't Know		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
KONO	505,491	252,295	253,196	6,756	3,793	2,963	453,926	226,204	227,722	44,809	22,298	22,511
Fiama	15,411	7,525	7,886	168	106	62	14,537	7,088	7,449	706	331	375
Gbane	24,404	12,155	12,249	284	162	122	21,910	10,884	11,026	2,210	1,109	1,101
Gbane Kandor	11,903	5,662	6,241	185	97	88	11,452	5,452	6,000	266	113	153
Gbense	15,716	7,718	7,998	267	155	112	14,160	6,952	7,208	1,289	611	678
Gorama Kono	18,294	9,240	9,054	243	122	121	15,708	7,913	7,795	2,343	1,205	1,138
Kamara	19,412	10,218	9,194	316	188	128	16,892	8,911	7,981	2,204	1,119	1,085
Lei	26,966	13,012	13,954	433	248	185	23,607	11,351	12,256	2,926	1,413	1,513
Mafindor	13,703	6,687	7,016	155	96	59	13,310	6,469	6,841	238	122	116
Nimikoro	61,176	31,870	29,306	746	418	328	51,252	26,612	24,640	9,178	4,840	4,338
Nimiyama	28,168	14,505	13,663	515	275	240	25,587	13,172	12,415	2,066	1,058	1,008
Sandor	89,879	44,249	45,630	1,078	605	473	86,045	42,281	43,764	2,756	1,363	1,393
Soa	39,250	19,087	20,163	547	319	228	34,108	16,547	17,561	4,595	2,221	2,374
Tankoro	8,496	4,329	4,167	189	97	92	6,934	3,563	3,371	1,373	669	704
Toli	5,046	2,410	2,636	37	17	20	4,000	1,934	2,066	1,009	459	550
Koidu/New	127,667	63,628	64,039	1,593	888	705	114,424	57,075	57,349	11,650	5,665	5,985

Region/ District/ Chiefdom	Total			Disable			Not Disable			Don't Know		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
NORTHERN	2,502,583	1,221,189	1,281,394	32,849	17,337	15,512	2,367,194	1,154,196	1,212,998	102,540	49,656	52,884
BOMBALI	605,741	296,123	309,618	8,797	4,669	4,128	562,820	275,099	287,721	34,124	16,355	17,769
Biriwa	47,300	22,719	24,581	752	418	334	44,265	21,240	23,025	2,283	1,061	1,222
Bombali Sebora	36,323	17,720	18,603	688	358	330	32,379	15,782	16,597	3,256	1,580	1,676
Gbanti-Kama-ranka	28,491	14,011	14,480	276	146	130	26,687	13,145	13,542	1,528	720	808
Gbendembu Ngowahun	38,800	18,498	20,302	803	397	406	34,636	16,527	18,109	3,361	1,574	1,787
Libeisaygahun	16,199	7,798	8,401	198	126	72	15,043	7,221	7,822	958	451	507
Magbaimba Ndorhahun	12,686	6,346	6,340	140	86	54	12,276	6,144	6,132	270	116	154
Makari Gbanti	81,201	39,708	41,493	1,199	680	519	74,767	36,463	38,304	5,235	2,565	2,670
Paki Masabong	19,880	9,487	10,393	430	215	215	18,813	8,956	9,857	637	316	321
Safroko Limba	31,256	14,683	16,573	704	384	320	25,916	12,202	13,714	4,636	2,097	2,539
Sanda Loko	45,019	22,252	22,767	421	192	229	42,795	21,216	21,579	1,803	844	959
Sanda Tendaren	26,228	13,178	13,050	464	232	232	24,482	12,291	12,191	1,282	655	627
Sella Limba	58,315	28,454	29,861	672	346	326	56,825	27,745	29,080	818	363	455
Tambakka	38,458	19,438	19,020	406	221	185	37,404	18,894	18,510	648	323	325
Makeni City	125,585	61,831	63,754	1,644	868	776	116,532	57,273	59,259	7,409	3,690	3,719

Table A14.1 Distribution of the Population by Chiefdom and Disability Status

Region/ District/ Chiefdom	Total			Disable			Not Disable			Don't Know		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
KAMBIA	344,095	164,749	179,346	4,489	2,322	2,167	334,348	159,924	174,424	5,258	2,503	2,755
Bramaia	36,756	17,358	19,398	541	312	229	35,778	16,851	18,927	437	195	242
Gbinle-Dixing	22,653	10,800	11,853	211	116	95	21,719	10,350	11,369	723	334	389
Magbema	91,817	44,062	47,755	1,349	714	635	88,823	42,559	46,264	1,645	789	856
Mambolo	37,928	17,900	20,028	447	198	249	36,772	17,372	19,400	709	330	379
Masungbala	31,797	14,793	17,004	589	304	285	30,720	14,253	16,467	488	236	252
Samu	64,651	30,889	33,762	605	291	314	63,349	30,251	33,098	697	347	350
Tonko Limba	58,493	28,947	29,546	747	387	360	57,187	28,288	28,899	559	272	287
KOINADUGU	408,687	203,951	204,736	4,125	2,233	1,892	392,236	195,708	196,528	12,326	6,010	6,316
Dembelia Sinkunia	21,373	10,804	10,569	262	149	113	20,168	10,162	10,006	943	493	450
Diang	29,063	14,699	14,364	247	134	113	27,281	13,816	13,465	1,535	749	786
Follosaba Dembelia	20,662	10,260	10,402	199	110	89	19,968	9,911	10,057	495	239	256
Kasunko	24,796	11,734	13,062	521	276	245	23,849	11,263	12,586	426	195	231
Mongo	47,836	23,553	24,283	358	186	172	45,035	22,119	22,916	2,443	1,248	1,195
Neya	42,704	21,741	20,963	211	115	96	41,132	20,955	20,177	1,361	671	690
Nieni	78,199	38,813	39,386	580	317	263	76,516	37,965	38,551	1,103	531	572
Sengbe	38,016	18,625	19,391	481	250	231	35,295	17,357	17,938	2,240	1,018	1,222
Sulima	35,639	18,686	16,953	287	176	111	34,922	18,286	16,636	430	224	206
Wara Wara Bafodia	34,606	17,320	17,286	237	122	115	33,935	16,982	16,953	434	216	218
Wara Wara Yagala	35,793	17,716	18,077	742	398	344	34,135	16,892	17,243	916	426	490

Region/ District/ Chiefdom	Total			Disable			Not Disable			Don't Know		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
PORT LOKO	612,920	293,456	319,464	9,050	4,725	4,325	576,182	275,306	300,876	27,688	13,425	14,263
BKM	40,179	19,179	21,000	699	353	346	37,740	17,989	19,751	1,740	837	903
Buya Romende	34,256	16,069	18,187	556	309	247	32,213	15,051	17,162	1,487	709	778
Dibia	15,519	7,252	8,267	381	192	189	14,816	6,918	7,898	322	142	180
Kaffu Bullom	119,986	58,885	61,101	1,339	706	633	112,436	55,145	57,291	6,211	3,034	3,177
Koya	85,062	40,046	45,016	1,435	728	707	77,202	36,251	40,951	6,425	3,067	3,358
Lokomasama	77,748	36,975	40,773	695	368	327	74,400	35,325	39,075	2,653	1,282	1,371
Maforki	85,767	40,758	45,009	1,159	608	551	82,118	38,944	43,174	2,490	1,206	1,284
Marampa	59,036	28,615	30,421	1,163	581	582	55,015	26,624	28,391	2,858	1,410	1,448
Masimera	40,843	19,324	21,519	737	406	331	39,013	18,378	20,635	1,093	540	553
Sanda Magbolontor	23,731	11,161	12,570	558	304	254	22,836	10,693	12,143	337	164	173
TMS	30,793	15,192	15,601	328	170	158	28,393	13,988	14,405	2,072	1,034	1,038
TONKOLILI	531,140	262,910	268,230	6,388	3,388	3,000	501,608	248,159	253,449	23,144	11,363	11,781
Gbonkolenken	67,705	33,497	34,208	1,016	525	491	65,191	32,249	32,942	1,498	723	775
Kafe Simira	36,670	18,467	18,203	338	192	146	32,485	16,320	16,165	3,847	1,955	1,892
Kalansogoia	35,864	17,976	17,888	337	157	180	33,419	16,772	16,647	2,108	1,047	1,061
Kholifa Mabang	16,666	7,996	8,670	236	118	118	15,908	7,632	8,276	522	246	276
Kolifa Rowalla	65,869	32,611	33,258	1,035	519	516	62,573	31,006	31,567	2,261	1,086	1,175
Kunike Barina	25,245	13,166	12,079	281	152	129	24,067	12,549	11,518	897	465	432
Kunike Sanda	74,415	37,519	36,896	841	479	362	71,905	36,193	35,712	1,669	847	822
Malal Mara	30,946	15,084	15,862	424	213	211	29,769	14,507	15,262	753	364	389
Sambaya	31,993	15,690	16,303	202	103	99	29,945	14,692	15,253	1,846	895	951
Tane	33,285	16,309	16,976	441	249	192	31,718	15,517	16,201	1,126	543	583
Yoni	112,482	54,595	57,887	1,237	681	556	104,628	50,722	53,906	6,617	3,192	3,425

Table A14.1 Distribution of the Population by Chiefdom and Disability Status

Region/ District/ Chiefdom	Total			Disable			Not Disable			Don't Know		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
SOUTHERN	1,439,165	700,917	738,248	22,770	12,207	10,563	1,320,246	642,122	678,124	96,149	46,588	49,561
BO	574,026	279,640	294,386	9,335	5,021	4,314	504,456	245,558	258,898	60,235	29,061	31,174
Badjia	8,135	3,982	4,153	201	110	91	7,837	3,826	4,011	97	46	51
Bagbo	25,884	12,803	13,081	443	244	199	23,976	11,847	12,129	1,465	712	753
Bagbwe	20,922	10,442	10,480	404	213	191	19,085	9,549	9,536	1,433	680	753
Baoma	45,835	22,482	23,353	654	357	297	41,484	20,301	21,183	3,697	1,824	1,873
Bumpe Ngawo	44,098	21,646	22,452	1,138	632	506	41,251	20,181	21,070	1,709	833	876
Gbo	5,399	2,674	2,725	137	69	68	4,873	2,413	2,460	389	192	197
Jaiama-Bongor	31,266	15,195	16,071	686	360	326	27,260	13,183	14,077	3,320	1,652	1,668
Kakua	51,030	24,352	26,678	696	397	299	43,292	20,638	22,654	7,042	3,317	3,725
Komboya	15,622	7,692	7,930	297	155	142	15,174	7,464	7,710	151	73	78
Lugbu	25,451	12,509	12,942	484	261	223	21,141	10,332	10,809	3,826	1,916	1,910
Niawa Lenga	13,947	6,788	7,159	197	97	100	13,316	6,470	6,846	434	221	213
Selenga	9,149	4,363	4,786	158	77	81	7,364	3,561	3,803	1,627	725	902
Tikonko	52,746	25,863	26,883	1,100	599	501	47,955	23,440	24,515	3,691	1,824	1,867
Valunia	35,558	18,177	17,381	526	310	216	32,043	16,377	15,666	2,989	1,490	1,499
Wunde	15,296	7,239	8,057	246	130	116	14,380	6,780	7,600	670	329	341
Bo City	173,688	83,433	90,255	1,968	1,010	958	144,025	69,196	74,829	27,695	13,227	14,468

Region/ District/ Chiefdom	Total			Disable			Not Disable			Don't Know		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
BONTHE	200,771	99,007	101,764	2,726	1,461	1,265	192,919	95,004	97,915	5,126	2,542	2,584
Bendu Cha	7,168	3,500	3,668	114	54	60	7,037	3,438	3,599	17	8	9
Bum	24,339	11,841	12,498	478	252	226	23,496	11,386	12,110	365	203	162
Dema	7,411	3,749	3,662	96	51	45	7,118	3,590	3,528	197	108	89
Imperi	33,384	17,012	16,372	294	168	126	31,934	16,269	15,665	1,156	575	581
Jong	33,816	16,511	17,305	692	374	318	32,832	15,979	16,853	292	158	134
Kpanga Kemo	10,438	5,057	5,381	125	77	48	9,163	4,428	4,735	1,150	552	598
Kwamebai Krim	14,289	6,975	7,314	224	121	103	13,830	6,748	7,082	235	106	129
Nongoba Bullom	20,060	10,009	10,051	254	132	122	19,092	9,539	9,553	714	338	376
Sittia	21,347	10,522	10,825	129	61	68	20,803	10,264	10,539	415	197	218
Sogbini	10,863	5,236	5,627	162	80	82	10,593	5,104	5,489	108	52	56
Yawbeko	7,581	3,670	3,911	80	50	30	7,251	3,486	3,765	250	134	116
Bonthe Municipal	10,075	4,925	5,150	78	41	37	9,770	4,773	4,997	227	111	116
MOYAMBA	318,002	153,467	164,535	5,866	3,099	2,767	293,592	141,314	152,278	18,544	9,054	9,490
Bagruwa	27,623	13,705	13,918	664	358	306	22,093	10,915	11,178	4,866	2,432	2,434
Bumpeh	37,424	17,805	19,619	571	315	256	33,899	16,069	17,830	2,954	1,421	1,533
Dasse	13,217	6,369	6,848	257	132	125	12,741	6,134	6,607	219	103	116
Fakunya	27,646	13,133	14,513	623	320	303	25,818	12,230	13,588	1,205	583	622
Kagboro	34,862	16,811	18,051	611	296	315	32,934	15,887	17,047	1,317	628	689
Kaiyamba	25,331	12,099	13,232	459	266	193	23,661	11,232	12,429	1,211	601	610
Kamajei	10,165	4,934	5,231	175	98	77	9,743	4,724	5,019	247	112	135

Table A14.1 Distribution of the Population by Chiefdom and Disability Status

Region/ District/ Chiefdom	Total			Disable			Not Disable			Don't Know		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Kongbora	10,328	4,979	5,349	317	161	156	9,858	4,745	5,113	153	73	80
Kori	30,501	14,790	15,711	648	348	300	27,850	13,501	14,349	2,003	941	1,062
Kowa	9,752	4,642	5,110	235	122	113	9,146	4,363	4,783	371	157	214
Lower Banta	37,296	18,125	19,171	349	195	154	36,417	17,657	18,760	530	273	257
Ribbi	33,165	15,730	17,435	393	203	190	31,253	14,804	16,449	1,519	723	796
Timdale	10,292	5,155	5,137	338	177	161	8,134	4,046	4,088	1,820	932	888
Upper Banta	10,400	5,190	5,210	226	108	118	10,045	5,007	5,038	129	75	54
PUJEHUN	346,366	168,803	177,563	4,843	2,626	2,217	329,279	160,246	169,033	12,244	5,931	6,313
Barri	36,905	17,697	19,208	506	279	227	35,684	17,046	18,638	715	372	343
Gallinas Peri	54,691	26,713	27,978	835	500	335	52,721	25,692	27,029	1,135	521	614
Kpaka	16,468	7,721	8,747	193	103	90	15,745	7,371	8,374	530	247	283
Kpanga-Kabonde	49,340	23,908	25,432	1,051	531	520	46,764	22,645	24,119	1,525	732	793
Makpele	31,050	15,395	15,655	419	244	175	29,786	14,754	15,032	845	397	448
Malen	49,258	25,159	24,099	506	267	239	46,595	23,728	22,867	2,157	1,164	993
Mano Sakrim	12,893	6,084	6,809	182	91	91	12,512	5,898	6,614	199	95	104
Panga Krim	8,969	4,296	4,673	161	93	68	8,713	4,157	4,556	95	46	49
Pejeh	13,600	6,576	7,024	137	75	62	13,313	6,442	6,871	150	59	91
Soro Gbema	42,232	20,260	21,972	320	164	156	37,659	18,105	19,554	4,253	1,991	2,262
Sowa	17,136	8,428	8,708	298	161	137	16,498	8,099	8,399	340	168	172
YKK	13,824	6,566	7,258	235	118	117	13,289	6,309	6,980	300	139	161

Region/ District/ Chiefdom	Total			Disable			Not Disable			Don't Know		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
WESTERN	1,493,779	744,417	749,362	11,933	6,625	5,308	1,336,405	665,205	671,200	145,441	72,587	72,854
WESTERN AREA RURAL	443,068	220,536	222,532	4,126	2,361	1,765	406,629	202,123	204,506	32,313	16,052	16,261
Koya	70,328	34,329	35,999	842	485	357	65,695	32,028	33,667	3,791	1,816	1,975
Mountain	30,358	15,929	14,429	226	126	100	26,832	14,078	12,754	3,300	1,725	1,575
Waterloo	213,439	104,772	108,667	1,835	1,045	790	196,800	96,493	100,307	14,804	7,234	7,570
York Rural	128,943	65,506	63,437	1,223	705	518	117,302	59,524	57,778	10,418	5,277	5,141
WESTERN AREA URBAN	1,050,711	523,881	526,830	7,807	4,264	3,543	929,776	463,082	466,694	113,128	56,535	56,593
Central 1	61,796	31,392	30,404	456	239	217	53,208	27,014	26,194	8,132	4,139	3,993
Central 2	19,648	10,042	9,606	229	133	96	19,195	9,789	9,406	224	120	104
East 1	61,015	30,179	30,836	427	232	195	52,285	25,865	26,420	8,303	4,082	4,221
East 2	89,179	45,011	44,168	652	352	300	81,467	41,085	40,382	7,060	3,574	3,486
East 3	447,840	221,999	225,841	3,318	1,815	1,503	402,686	199,343	203,343	41,836	20,841	20,995
West 1	53,812	26,426	27,386	443	234	209	41,488	20,359	21,129	11,881	5,833	6,048
West 2	129,600	64,206	65,394	962	510	452	113,967	56,344	57,623	14,671	7,352	7,319
West 3	187,821	94,626	93,195	1,320	749	571	165,480	83,283	82,197	21,021	10,594	10,427

Table A14.2 Distribution of the Persons with disability by Chiefdom and Type of Disability

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
SierraLeone	93,129	20,345	8,305	11,650	14,184	6,313	4,734	3,604	3,264	4,376	2,869	1,285	2,261	1,556	501	669	7,213
EASTERN	25,577	4,980	2,806	2,994	3,405	2,207	1,418	956	941	1,444	693	360	514	460	164	139	2,096
KAILAHUN	9,666	1,820	1,156	933	1,224	903	613	345	292	595	282	125	160	205	90	58	865
Dea	396	54	29	32	59	38	27	14	9	21	17	5	3	16	9	3	60
Jawie	1,041	195	85	88	133	88	49	34	27	61	33	15	19	77	29	8	100
Kissi Kama	470	96	86	37	58	28	25	10	11	21	7	5	10	8	1	7	60
Kissi Teng	701	153	72	75	113	37	51	41	28	38	27	2	13	12	1	2	36
Kissi Tongi	518	95	62	76	61	36	28	25	23	26	13	5	11	15	6	1	35
Kpeje Bongre	375	84	34	31	32	43	16	15	12	36	6	9	6	1	-	1	49
Kpeje West	363	53	24	37	55	35	26	8	13	23	13	2	11	20	2	-	41
Luawa	2,121	386	306	207	236	182	103	66	58	142	61	26	32	25	17	15	259
Malema	586	105	62	50	98	60	63	22	19	24	19	5	7	3	1	4	44
Mandu	628	125	108	49	89	53	43	26	21	23	13	9	14	14	9	6	26
Njaluahun	866	185	84	73	108	97	50	25	29	75	37	18	14	5	2	7	57
Penguia	519	105	66	50	45	92	35	23	15	38	8	9	7	1	1	1	23
Upper Bambara	530	110	67	72	64	54	46	18	12	38	13	6	2	5	9	-	14
Yawei	552	74	71	56	73	60	51	18	15	29	15	9	11	3	3	3	61

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
KENEMA	9,155	1,570	921	1,100	1,332	820	547	372	357	530	253	146	193	148	47	39	780
Dama	421	67	47	65	57	35	19	2	12	31	11	8	10	2	-	2	53
Dodo	303	25	18	35	68	24	28	11	10	13	1	3	12	8	-	2	45
Gaura	390	54	26	50	63	33	31	28	15	24	5	14	5	11	2	-	29
Gorama Mende	586	113	66	93	73	58	19	23	27	23	23	11	16	15	6	2	18
Kandu Lekpeama	352	61	14	39	78	26	37	7	9	26	9	7	6	17	-	2	14
Koya	262	65	14	47	34	20	18	8	5	19	10	1	3	1	-	-	17
Langrama	67	6	6	15	7	6	7	2	4	6	1	1	1	1	-	2	2
Lower Bambara	1,219	210	95	110	221	124	82	72	43	61	28	8	13	42	7	4	99
Malegohun	456	84	47	40	62	54	30	14	16	33	12	8	7	1	6	4	38
Niawa	182	23	17	29	24	27	15	5	5	19	2	1	2	2	-	3	8
Nomo	71	10	10	8	12	7	6	-	5	4	3	2	-	-	-	-	4
Nongowa	921	147	141	95	114	97	57	36	33	43	37	13	24	11	-	5	68
Simbaru	243	46	18	33	43	17	13	10	8	16	5	4	4	3	3	-	20

Table A14.2 Distribution of the Persons with disability by Chiefdom and Type of Disability

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
Small Bo	478	86	52	87	49	45	13	15	16	29	30	15	8	3	2	2	26
Tunkia	564	66	55	76	87	45	60	23	23	37	18	6	20	4	5	3	36
Wandor	388	58	36	53	57	46	20	14	15	17	4	6	12	3	4	2	41
Kenema City	2,252	449	259	225	283	156	92	102	111	129	54	38	50	24	12	6	262
KONO	6,756	1,590	729	961	849	484	258	239	292	319	158	89	161	107	27	42	451
Fiama	168	46	14	27	20	11	1	14	8	10	1	-	9	2	-	1	4
Gbane	284	79	26	38	29	22	12	12	19	15	3	1	6	1	-	2	19
Gbane Kandor	185	41	20	18	29	18	10	9	6	8	1	-	3	6	-	-	16
Gbense	267	73	71	22	23	11	16	6	4	9	4	-	9	5	1	-	13
Gorama Kono	243	51	20	38	38	30	12	5	8	13	6	-	8	4	-	1	9
Kamara	316	64	17	27	49	22	15	15	11	12	19	1	4	8	-	3	49
Lei	433	96	24	83	77	31	10	14	10	17	10	1	11	5	1	4	39

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
Mafindor	155	31	25	18	22	16	5	2	6	5	2	-	2	2	-	-	19
Nimikoro	746	184	64	110	95	49	37	23	39	36	15	13	21	9	7	6	38
Nimiyama	515	104	65	90	56	41	19	15	21	30	10	5	14	12	-	3	30
Sandor	1,078	249	137	203	122	83	38	27	50	45	16	12	27	7	3	3	56
Soa	547	120	65	75	62	47	19	21	31	36	8	12	9	7	1	3	31
Tankoro	189	44	10	24	28	12	3	7	15	8	3	2	4	5	-	3	21
Toli	37	6	8	10	1	1	2	3	-	3	-	-	2	-	1	-	-
Koidu/New	1,593	402	163	178	198	90	59	66	64	72	60	42	32	34	13	13	107
NORTHERN	32,849	8,305	2,263	4,377	5,673	1,935	1,729	1,272	1,205	1,340	854	391	873	392	147	278	1,815
BOMBALI	8,797	2,065	599	1,159	1,408	500	480	390	347	419	193	132	271	133	37	84	580
Biriwa	752	158	44	106	172	38	50	27	29	33	6	14	16	15	5	14	25
Bombali Sebora	688	146	55	62	184	32	33	22	18	22	15	11	23	4	9	3	49
Gbanti-Kamaranka	276	55	21	57	25	20	11	7	19	11	3	5	16	2	1	1	22
Gbendembu Ngowahun	803	156	25	173	107	32	36	34	24	42	34	20	26	5	6	5	78

Table A14.2 Distribution of the Persons with disability by Chiefdom and Type of Disability

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
Libeisayga-hun	198	48	10	50	12	20	9	6	7	11	2	2	7	1	-	3	10
Magbaimba Ndorhahun	140	31	8	30	20	4	10	4	4	14	3	1	3	4	-	-	4
Makari Gbanti	1,199	347	97	122	165	67	79	51	52	41	24	16	32	9	-	22	75
Paki Masa-bong	430	81	33	55	83	28	37	12	23	10	6	3	9	4	1	1	44
Safroko Limba	704	196	34	104	112	48	36	18	22	30	16	4	22	35	2	3	22
Sanda Loko	421	115	22	42	79	24	16	9	12	23	18	18	12	4	2	4	21
Sanda Tendaren	464	106	29	41	115	28	21	15	15	22	7	8	20	6	2	6	23
Sella Limba	672	163	30	99	57	34	42	47	32	58	4	12	23	3	3	4	61
Tambakka	406	92	49	56	56	40	11	14	5	19	17	4	11	2	2	3	25
Makeni City	1,644	371	142	162	221	85	89	124	85	83	38	14	51	39	4	15	121
KAMBIA	4,489	1,118	230	661	965	235	200	166	172	190	120	33	93	52	8	33	213
Bramaia	541	149	30	70	76	27	18	11	37	34	22	5	12	3	1	2	44

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
Gbinle-Dixing	211	67	10	25	41	11	10	9	14	8	6	1	2	2	-	2	3
Magbema	1,349	309	76	207	362	72	59	39	32	44	34	11	22	12	2	10	58
Mambolo	447	116	29	65	83	23	17	19	11	19	17	3	11	12	-	3	19
Masungbala	589	115	22	78	180	27	41	35	24	12	13	4	10	8	1	8	11
Samu	605	161	33	71	124	42	28	23	25	34	9	3	11	7	1	3	30
Tonko Limba	747	201	30	145	99	33	27	30	29	39	19	6	25	8	3	5	48
KOINADUGU	4,125	1,061	319	584	643	302	198	140	132	178	96	68	90	81	18	27	188
Dembelia Sinkunia	262	59	24	35	41	25	17	16	9	11	2	2	4	3	-	1	13
Diang	247	69	29	37	27	15	6	4	10	13	9	5	6	4	1	4	8
Follosaba Dembelia	199	61	12	26	18	20	5	6	1	9	2	6	8	2	-	1	22
Kasunko	521	99	30	55	134	24	20	21	17	15	37	13	12	9	5	2	28
Mongo	358	83	35	61	56	21	21	15	17	16	-	-	10	9	-	7	7
Neya	211	78	9	51	11	21	9	7	8	2	4	3	1	1	3	1	2
Nieni	580	144	28	107	81	49	28	11	28	24	14	6	12	14	-	1	33

Table A14.2 Distribution of the Persons with disability by Chiefdom and Type of Disability

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
Sengbe	481	129	33	47	78	31	31	14	14	29	4	17	12	11	2	3	26
Sulima	287	64	36	40	36	25	18	18	7	16	3	1	9	3	2	-	9
Wara Wara Bafodia	237	46	20	42	48	22	12	6	9	8	6	4	4	3	-	-	7
Wara Wara Yagala	742	229	63	83	113	49	31	22	12	35	15	11	12	22	5	7	33
PORT LOKO	9,050	2,152	604	1,083	1,843	492	563	331	330	331	299	90	228	75	47	83	499
BKM	699	111	26	97	159	34	79	28	17	17	64	7	17	3	4	14	22
Buya Romende	556	139	36	79	86	51	25	20	15	24	16	5	14	6	2	8	30
Dibia	381	62	11	30	149	14	33	12	22	8	7	1	7	2	2	2	19
Kaffu Bullom	1,339	376	110	116	268	60	104	44	50	50	36	6	27	21	8	10	53
Koya	1,435	333	94	141	271	82	85	42	55	59	79	18	30	19	7	8	112
Lokomasa-ma	695	197	66	93	93	50	17	33	28	34	16	12	16	4	5	7	24
Maforki	1,159	284	91	129	235	67	71	36	43	39	37	10	33	3	6	11	64

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
Marampa	1,163	268	67	162	230	66	62	48	48	47	17	12	45	11	8	11	61
Masimera	737	196	50	102	156	28	44	39	23	19	11	1	16	3	3	5	41
Sanda Mag-bolontor	558	115	19	103	120	22	22	18	15	23	9	9	18	3	-	3	59
TMS	328	71	34	31	76	18	21	11	14	11	7	9	5	-	2	4	14
TONKOLILI	6,388	1,909	511	890	814	406	288	245	224	222	146	68	191	51	37	51	335
Gbonkolen-ken	1,016	261	62	164	129	57	50	41	33	46	27	15	31	7	9	14	70
Kafe Simira	338	104	27	65	25	31	16	13	13	10	3	4	8	-	2	1	16
Kalansogoia	337	85	44	53	60	16	14	9	10	8	10	3	6	1	2	3	13
Kholifa Mabang	236	80	39	28	19	17	10	10	6	2	2	2	13	1	-	2	5
Kolifa Rowalla	1,035	338	87	127	112	64	50	26	38	55	20	9	28	5	3	10	63
Kunike Barina	281	101	17	35	41	13	20	11	13	5	-	1	12	1	1	1	9
Kunike Sanda	841	257	60	102	118	55	36	48	25	32	20	9	24	13	4	6	32
Malal Mara	424	123	33	52	52	26	15	27	13	11	11	2	12	6	2	1	38
Sambaya	202	66	14	39	25	20	7	3	5	6	2	2	2	1	2	1	7

Table A14.2 Distribution of the Persons with disability by Chiefdom and Type of Disability

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
Tane	441	135	28	55	88	23	20	15	11	14	16	3	10	3	3	2	15
Yoni	1,237	359	100	170	145	84	50	42	57	33	35	18	45	13	9	10	67
SOUTHERN	22,770	3,732	1,910	2,965	3,571	1,611	1,199	798	690	1,148	875	381	664	542	109	172	2,403
BO	9,335	1,546	816	1,233	1,408	647	504	321	308	476	296	142	282	201	52	81	1,022
Badjia	201	26	13	21	31	14	9	4	5	8	7	2	2	14	3	-	42
Bagbo	443	47	48	52	63	48	28	21	15	28	11	13	20	15	-	3	31
Bagbwe	404	72	33	53	34	35	23	11	8	40	31	14	9	3	1	-	37
Baoma	654	108	60	131	85	43	26	16	23	26	20	9	17	18	16	2	54
Bumpe Ngawo	1,138	114	91	150	182	149	63	26	27	31	37	11	43	19	4	7	184
Gbo	137	12	2	31	16	7	5	3	4	9	9	4	7	8	5	2	13
Jaiama-Bongor	686	117	53	58	138	39	28	28	19	42	23	7	19	21	1	2	91
Kakua	696	139	49	88	120	34	64	20	50	33	7	8	23	6	1	3	51

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
Komboya	297	39	11	23	30	16	23	15	10	22	7	2	15	5	3	4	72
Lugbu	484	89	34	62	64	46	21	20	11	32	14	18	13	15	2	5	38
Niawa Lenga	197	38	19	44	15	11	12	10	3	9	12	1	5	4	1	-	13
Selenga	158	20	17	16	14	9	5	4	4	6	19	2	7	1	-	2	32
Tikonko	1,100	175	106	127	216	50	69	37	30	45	16	18	29	17	4	23	138
Valunia	526	79	46	134	77	39	20	16	11	24	16	4	10	8	2	7	33
Wunde	246	38	15	23	32	15	12	9	12	11	12	1	9	4	2	6	45
Bo City	1,968	433	219	220	291	92	96	81	76	110	55	28	54	43	7	15	148
BONTHE	2,726	473	256	267	423	195	142	90	92	120	86	58	62	49	7	24	382
Bendu Cha	114	15	6	12	21	5	15	3	1	4	4	1	3	4	-	1	19
Bum	478	75	42	52	80	33	23	10	18	13	12	2	7	8	-	2	101
Dema	96	10	14	6	37	4	6	6	1	4	2	-	1	3	-	2	-
Imperi	294	54	18	31	46	23	25	7	12	16	6	4	10	5	-	2	35
Jong	692	146	61	56	100	45	34	34	18	35	11	24	16	14	3	4	91

Table A14.2 Distribution of the Persons with disability by Chiefdom and Type of Disability

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
Kpanga Kemo	125	19	8	21	16	15	5	4	7	7	-	2	5	-	1	1	14
Kwamebai Krim	224	27	13	19	29	12	7	6	8	6	31	17	3	8	2	1	35
Nongoba Bullom	254	54	40	18	36	17	12	8	12	14	7	4	6	5	1	4	16
Sittia	129	20	15	16	17	11	6	3	9	8	4	1	1	-	-	3	15
Sogbini	162	16	12	16	23	11	3	5	4	6	5	2	8	-	-	1	50
Yawbeko	80	17	19	14	8	6	2	2	1	3	1	-	1	2	-	1	3
Bonthe Municipal	78	20	8	6	10	13	4	2	1	4	3	1	1	-	-	2	3
MOYAMBA	5,866	978	431	908	964	368	237	195	180	278	305	83	177	132	24	46	560
Bagruwa	664	85	24	95	96	35	14	19	18	25	89	13	25	35	5	11	75
Bumpeh	571	121	35	69	115	38	19	29	21	13	16	15	9	12	2	7	50
Dasse	257	43	19	92	37	8	2	2	5	11	8	-	13	1	-	2	14
Fakunya	623	112	41	79	62	61	31	15	20	46	15	7	17	15	1	-	101

	Main disability																
Region /District/ Chiefdom	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
Kagboro	611	96	52	59	164	32	22	13	18	33	28	8	12	26	3	3	42
Kaiyamba	459	79	38	68	99	26	23	14	21	21	11	5	16	2	-	4	32
Kamajei	175	27	19	37	24	12	11	2	9	9	3	4	8	-	-	1	9
Kongbora	317	45	20	57	39	21	11	26	6	18	14	1	17	-	-	2	40
Kori	648	100	50	111	151	44	31	21	16	31	12	7	17	9	3	1	44
Kowa	235	32	8	42	44	10	19	7	5	11	5	-	6	9	2	1	34
Lower Banta	349	73	47	58	35	22	18	12	13	21	6	4	11	-	1	10	18
Ribbi	393	98	29	61	51	21	18	15	16	9	7	7	12	1	3	1	44
Timdale	338	33	24	38	23	12	9	9	7	14	90	9	7	21	3	2	37
Upper Banta	226	34	25	42	24	26	9	11	5	16	1	3	7	1	1	1	20
PUJEHUN	4,843	735	407	557	776	401	316	192	110	274	188	98	143	160	26	21	439
Barri	506	88	47	69	81	45	32	17	12	16	18	7	16	25	1	1	31
Gallinas Peri	835	117	86	100	115	96	48	44	18	43	31	10	32	22	6	1	66
Kpaka	193	23	21	27	28	23	8	16	2	18	4	1	11	-	1	-	10

Table A14.2 Distribution of the Persons with disability by Chiefdom and Type of Disability

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
Kpanga-Kabonde	1,051	163	70	95	197	48	67	26	22	71	47	45	24	43	5	2	126
Makpele	419	43	41	65	85	22	36	14	12	19	19	7	10	7	-	2	37
Malen	506	77	37	44	83	44	29	21	13	25	19	10	14	31	3	3	53
Mano Sakrim	182	30	25	20	26	12	11	4	2	5	7	3	3	-	-	-	34
Panga Krim	161	19	8	15	21	12	15	9	5	11	11	-	8	1	7	5	14
Pejeh	137	32	12	22	13	11	10	7	4	5	5	2	2	2	-	1	9
Soro Gbema	320	59	27	41	27	38	11	12	10	17	11	5	15	14	2	4	27
Sowa	298	57	15	40	45	28	23	13	6	26	11	7	8	12	1	-	6
YKK	235	27	18	19	55	22	26	9	4	18	5	1	-	3	-	2	26
WESTERN	11,933	3,328	1,326	1,314	1,535	560	388	578	428	444	447	153	210	162	81	80	899
WESTERN AREA RURAL	4,126	1,236	443	489	543	187	152	147	136	143	161	49	59	42	13	23	303
Koya	842	258	88	125	94	37	34	15	27	24	59	9	10	12	4	5	41

Region /District/ Chiefdom	Main disability																
	Total	Physical disability (Polio)	Physical disability (Amputee)	Blind or visually impaired	Partially sighted	Deaf	Partially deaf	Speech difficulties	Mute	Mental difficulties	Spinal injury/ disability	Psychiatric disability	Epileptic	Rheumatism	Albinism	Kyphoscoliosis (Hunch Back)	Other
Mountain	226	54	27	26	29	7	11	17	6	10	7	2	2	10	3	-	15
Waterloo	1,835	604	205	224	222	79	58	56	50	68	37	23	21	14	3	10	161
York Rural	1,223	320	123	114	198	64	49	59	53	41	58	15	26	6	3	8	86
WESTERN AREA URBAN	7,807	2,092	883	825	992	373	236	431	292	301	286	104	151	120	68	57	596
Central 1	456	109	67	39	70	14	12	29	19	16	13	3	10	12	4	2	37
Central 2	229	90	25	19	21	4	7	12	4	8	16	6	-	-	-	5	12
East 1	427	139	41	50	39	15	12	15	26	23	9	4	5	4	5	4	36
East 2	652	178	74	81	82	26	16	25	25	20	22	7	10	26	3	6	51
East 3	3,318	918	371	296	427	181	116	179	129	134	107	31	80	48	29	27	245
West 1	443	124	40	43	52	9	19	26	16	17	21	11	7	5	6	2	45
West 2	962	255	106	108	123	55	29	61	34	41	43	22	13	2	7	8	55
West 3	1,320	279	159	189	178	69	25	84	39	42	55	20	26	23	14	3	115

Table A14.3 Distribution of the Persons with disability by Chiefdom and Cause of Disability

	Main disability									
Region / District/ Chiefdom	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
SierraLeone	93,129	15,044	37,683	4,296	4,146	8,164	3,829	7,589	9,751	2,627
EASTERN	25,577	3,909	10,611	1,151	1,046	2,169	1,546	1,636	2,746	763
KAILAHUN	9,666	1,537	3,985	393	397	835	635	705	981	198
Dea	396	87	110	14	17	49	32	26	59	2
Jawie	1,041	156	417	54	27	86	48	102	121	30
Kissi Kama	470	101	203	14	27	44	19	24	28	10
Kissi Teng	701	109	335	28	25	35	21	76	66	6
Kissi Tongi	518	78	163	14	23	39	17	89	82	13
Kpeje Bongre	375	61	162	10	15	38	19	23	40	7
Kpeje West	363	32	157	7	15	39	45	27	33	8
Luawa	2,121	293	919	93	94	202	161	95	199	65
Malema	586	132	197	14	21	43	46	45	68	20
Mandu	628	113	249	34	28	45	59	54	44	2
Njaluahun	866	117	426	37	30	68	31	47	107	3
Penguia	519	91	231	24	11	43	32	24	48	15
Upper Bambara	530	99	210	28	34	49	45	26	35	4
Yawei	552	68	206	22	30	55	60	47	51	13

Region / District/ Chiefdom	Main disability									
	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
KENEMA	9,155	1,417	3,615	431	437	678	557	651	1,038	331
Dama	421	69	147	18	29	32	19	34	58	15
Dodo	303	44	104	8	59	20	18	27	21	2
Gaura	390	71	117	10	18	20	33	43	59	19
Gorama Mende	586	67	290	29	38	46	24	26	58	8
Kandu Lekpeama	352	71	140	12	24	20	15	32	36	2
Koya	262	39	87	11	14	24	20	33	31	3
Langrama	67	4	44	-	1	3	4	-	9	2
Lower Bambara	1,219	165	505	38	59	110	59	91	154	38
Malegohun	456	54	218	24	26	36	34	16	35	13
Niawa	182	29	96	2	3	12	7	22	6	5
Nomo	71	12	23	3	3	5	14	4	6	1
Nongowa	921	150	312	44	34	69	111	78	80	43
Simbaru	243	38	105	9	13	19	8	17	29	5
Small Bo	478	57	202	38	19	34	27	23	68	10

Table A14.3 Distribution of the Persons with disability by Chiefdom and Cause of Disability

	Main disability									
Region / District/ Chiefdom	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
Tunkia	564	100	197	25	20	29	64	43	67	19
Wandor	388	64	157	17	14	37	18	21	49	11
Kenema City	2,252	383	871	143	63	162	82	141	272	135
KONO	6,756	955	3,011	327	212	656	354	280	727	234
Fiama	168	29	76	5	1	14	11	4	26	2
Gbane	284	42	117	19	5	31	17	10	28	15
Gbane Kandor	185	45	77	7	12	12	6	12	12	2
Gbense	267	47	94	11	4	18	40	12	25	16
Gorama Kono	243	32	115	7	8	31	12	17	17	4
Kamara	316	46	169	18	11	25	13	6	20	8
Lei	433	53	222	9	14	48	16	29	36	6
Mafindor	155	26	68	7	4	14	8	6	13	9
Nimikoro	746	109	331	39	25	66	45	28	82	21
Nimiyama	515	36	243	18	27	45	20	20	90	16

	Main disability									
Region / District/ Chiefdom	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
Sandor	1,078	131	526	40	42	114	35	46	90	54
Soa	547	77	233	22	15	58	41	19	67	15
Tankoro	189	37	83	10	5	16	15	3	20	-
Toli	37	3	25	1	-	3	1	1	3	-
Koidu/New	1,593	242	632	114	39	161	74	67	198	66
NORTHERN	32,849	5,772	12,937	1,514	1,327	3,067	987	3,219	3,319	707
BOMBALI	8,797	1,658	3,526	337	307	759	251	794	943	222
Biriwa	752	113	368	27	24	57	9	47	92	15
Bombali Sebora	688	137	202	29	28	59	32	119	71	11
Gbanti-Kamaranka	276	49	124	10	12	14	3	25	29	10
Gbendembu Ngowahun	803	122	315	23	48	67	11	100	105	12
Libeisayga-hun	198	29	113	11	4	15	5	8	12	1
Magbaimba Ndorhahun	140	20	66	1	6	11	2	9	19	6
Makari Gbanti	1,199	206	429	57	52	124	79	86	143	23
Paki Masabong	430	68	185	13	21	42	4	40	49	8

Table A14.3 Distribution of the Persons with disability by Chiefdom and Cause of Disability

	Main disability									
Region / District/ Chiefdom	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
Safroko Limba	704	151	286	27	30	78	11	58	52	11
Sanda Loko	421	87	187	14	10	41	12	26	38	6
Sanda Tendaren	464	78	182	11	11	29	5	72	51	25
Sella Limba	672	141	295	25	16	53	10	34	82	16
Tambakka	406	63	186	14	11	25	19	35	37	16
Makeni City	1,644	394	588	75	34	144	49	135	163	62
KAMBIA	4,489	687	1,692	224	196	412	67	698	461	52
Bramaia	541	68	252	31	15	36	9	52	69	9
Gbinle-Dixing	211	34	105	11	5	20	4	19	11	2
Magbema	1,349	173	460	71	54	110	27	291	152	11
Mambolo	447	66	159	23	43	44	4	53	50	5
Masungbala	589	110	164	23	34	62	5	133	49	9
Samu	605	103	268	26	17	58	6	79	43	5
Tonko Limba	747	133	284	39	28	82	12	71	87	11

	Main disability									
Region / District/ Chiefdom	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
KOINADU-GU	4,125	672	1,784	179	163	370	144	350	386	77
Dembelia Sinkunia	262	47	106	21	10	22	6	28	19	3
Diang	247	35	104	9	10	18	11	23	24	13
Follosaba Dembelia	199	39	80	16	4	16	-	15	29	-
Kasunko	521	87	202	9	35	44	30	66	44	4
Mongo	358	52	165	7	12	33	12	31	31	15
Neya	211	27	87	10	15	13	11	18	28	2
Nieni	580	84	300	21	16	47	12	33	60	7
Sengbe	481	84	204	22	16	49	6	47	38	15
Sulima	287	50	144	15	10	16	14	15	21	2
Wara Wara Bafodia	237	39	101	7	10	15	12	22	19	12
Wara Wara Yagala	742	128	291	42	25	97	30	52	73	4
PORT LOKO	9,050	1,759	3,294	445	350	894	275	1,040	784	209
BKM	699	86	234	60	19	73	31	152	37	7
Buya Romende	556	97	234	23	30	66	18	36	49	3

Table A14.3 Distribution of the Persons with disability by Chiefdom and Cause of Disability

	Main disability									
Region / District/ Chiefdom	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
Dibia	381	70	127	11	25	22	5	98	19	4
Kaffu Bullom	1,339	312	411	84	58	159	41	149	106	19
Koya	1,435	323	528	75	52	132	52	144	115	14
Lokomasa-ma	695	166	261	37	20	67	8	52	55	29
Maforki	1,159	197	383	49	40	141	48	133	134	34
Marampa	1,163	238	450	49	45	86	20	116	115	44
Masimera	737	131	283	31	25	82	24	85	51	25
Sanda Mag-bolontor	558	66	274	16	25	36	20	40	70	11
TMS	328	73	109	10	11	30	8	35	33	19
TONKOLILI	6,388	996	2,641	329	311	632	250	337	745	147
Gbonkolen-ken	1,016	148	422	45	65	108	35	46	120	27
Kafe Simira	338	57	146	26	9	43	6	10	32	9
Kalansogoia	337	38	142	18	12	34	19	35	20	19
Kholifa Mabang	236	28	99	11	9	20	26	6	30	7

	Main disability									
Region / District/ Chiefdom	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
Kolifa Rowalla	1,035	181	440	48	47	95	37	40	134	13
Kunike Barina	281	46	124	16	7	38	7	19	20	4
Kunike Sanda	841	137	341	44	73	64	22	43	104	13
Malal Mara	424	64	159	17	21	43	28	22	64	6
Sambaya	202	16	98	6	8	20	13	11	25	5
Tane	441	54	186	30	15	52	20	24	56	4
Yoni	1,237	227	484	68	45	115	37	81	140	40
SOUTHERN	22,770	3,175	9,950	821	1,298	1,758	902	1,926	2,326	614
BO	9,335	1,342	4,104	338	482	783	348	732	944	262
Badjia	201	18	98	9	21	16	10	16	13	-
Bagbo	443	70	177	10	27	35	25	29	62	8
Bagbwe	404	57	220	8	20	31	8	24	29	7
Baoma	654	76	285	28	35	69	14	58	71	18
Bumpe Ngawo	1,138	130	535	26	70	114	43	94	87	39
Gbo	137	18	58	2	6	22	5	9	16	1

Table A14.3 Distribution of the Persons with disability by Chiefdom and Cause of Disability

	Main disability									
Region / District/ Chiefdom	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
Jaiama-Bongor	686	91	292	26	31	59	23	53	77	34
Kakua	696	133	307	31	31	41	18	45	68	22
Komboya	297	40	121	4	16	21	20	16	55	4
Lugbu	484	71	238	6	29	37	13	37	29	24
Niawa Lenga	197	24	64	9	9	15	16	36	19	5
Selenga	158	10	106	6	4	11	8	4	6	3
Tikonko	1,100	165	472	34	76	89	72	91	86	15
Valunia	526	50	254	19	26	46	14	48	57	12
Wunde	246	40	107	8	9	24	10	17	31	-
Bo City	1,968	349	770	112	72	153	49	155	238	70
BONTHE	2,726	405	1,191	79	139	201	108	247	278	78
Bendu Cha	114	18	65	2	6	4	2	9	6	2
Bum	478	52	215	16	19	30	16	49	64	17
Dema	96	17	38	1	17	7	1	5	9	1

	Main disability									
Region / District/ Chiefdom	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
Imperi	294	36	112	10	10	31	13	14	56	12
Jong	692	142	290	23	21	50	25	81	50	10
Kpanga Kemo	125	9	73	1	11	9	5	3	13	1
Kwamebai Krim	224	27	94	6	20	15	13	13	32	4
Nongoba Bullom	254	51	103	9	8	18	23	20	16	6
Sittia	129	22	61	1	6	10	2	8	10	9
Sogbini	162	6	55	4	12	14	3	39	16	13
Yawbeko	80	10	40	5	6	8	3	3	4	1
Bonthe Municipal	78	15	45	1	3	5	2	3	2	2
MOYAMBA	5,866	762	2,526	204	424	422	168	558	632	170
Bagruwa	664	81	250	17	76	42	17	90	76	15
Bumpeh	571	104	221	24	36	40	13	59	51	23
Dasse	257	41	122	8	20	26	5	17	17	1
Fakunya	623	65	295	15	20	41	18	42	108	19
Kagboro	611	52	298	23	43	43	4	93	46	9

Table A14.3 Distribution of the Persons with disability by Chiefdom and Cause of Disability

	Main disability									
Region / District/ Chiefdom	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
Kaiyamba	459	50	209	21	9	37	17	47	57	12
Kamajei	175	24	84	7	25	6	6	9	8	6
Kongbora	317	49	119	15	15	27	14	25	32	21
Kori	648	78	281	23	35	51	23	59	70	28
Kowa	235	31	93	6	31	19	11	23	17	4
Lower Banta	349	65	155	13	17	26	14	20	25	14
Ribbi	393	61	144	11	22	36	18	15	80	6
Timdale	338	45	102	13	60	19	4	48	40	7
Upper Banta	226	16	153	8	15	9	4	11	5	5
PUJEHUN	4,843	666	2,129	200	253	352	278	389	472	104
Barri	506	64	218	15	20	53	36	47	43	10
Gallinas Peri	835	123	349	53	46	55	42	55	94	18
Kpaka	193	21	96	4	6	14	18	7	18	9
Kpanga-Kabonde	1,051	115	534	38	61	75	60	68	81	19

	Main disability									
Region / District/ Chiefdom	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
Makpele	419	40	148	27	34	29	22	42	63	14
Malen	506	77	217	21	17	38	17	58	49	12
Mano Sakrim	182	23	69	5	7	12	29	14	23	-
Panga Krim	161	26	75	4	12	12	9	9	13	1
Pejeh	137	25	59	5	7	8	12	8	13	-
Soro Gbema	320	48	142	10	14	19	5	35	33	14
Sowa	298	60	108	9	19	17	19	35	28	3
YKK	235	44	114	9	10	20	9	11	14	4
WESTERN	11,933	2,188	4,185	810	475	1,170	394	808	1,360	543
WESTERN AREA RURAL	4,126	696	1,541	284	181	412	201	178	464	169
Koya	842	133	329	48	59	89	53	25	87	19
Mountain	226	45	74	19	17	19	8	14	19	11
Waterloo	1,835	278	721	134	61	159	104	77	224	77
York Rural	1,223	240	417	83	44	145	36	62	134	62

Table A14.3 Distribution of the Persons with disability by Chiefdom and Cause of Disability

	Main disability									
Region / District/ Chiefdom	Total	Congenital (from birth)	Disease/ illness	Transport Accident	Occupational injury	Other accident	War	Natural ageing process	Other	Not stated
WESTERN AREA URBAN	7,807	1,492	2,644	526	294	758	193	630	896	374
Central 1	456	108	137	25	13	39	11	56	34	33
Central 2	229	23	100	7	4	16	11	24	40	4
East 1	427	84	141	21	22	52	13	23	59	12
East 2	652	125	236	50	27	68	6	40	58	42
East 3	3,318	642	1,153	239	107	331	82	231	368	165
West 1	443	69	151	28	14	48	11	56	54	12
West 2	962	196	271	76	51	97	15	84	125	47
West 3	1,320	245	455	80	56	107	44	116	158	59

CHAPTER 15: INTERNET, ALCOHOL AND TOBACCO USE

15.1 Introduction

15.1.1 An overview of the Internet

The Internet is the global system of interconnected computer networks that use the Internet protocol suite (TCP/IP) to link devices worldwide. It is a network of networks that consists of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies.

The Internet carries an extensive range of information resources and services, such as the inter-linked hypertext documents and applications of the World Wide Web (WWW), electronic mail, telephony, and file sharing.

Internet use grew rapidly in the West from the mid-1990s and from the late 1990s in the developing world. In two decades, Internet use has grown 100 times, to over one third of the world's population.

Most traditional communications media, including telephony, radio, television, paper mail and newspapers are being reshaped or redefined by the Internet, giving birth to new services such as email, Internet telephony, Internet television, online music, digital newspapers, and video streaming websites. Newspaper, book, and other print publishing are adapting to website technology, or are reshaped into blogging, web feeds and online news aggregators.

The Internet has enabled and accelerated new forms of personal interactions through instant messaging, Internet forums, and social networking. Online shopping has grown exponentially both for major retailers and small businesses and entrepreneurs, as it enables firms to extend their service to a larger market or even sell goods and services entirely online. Business-to-business and financial services on the Internet affect supply chains across entire industries.

In Chapter II, Section 9(3) of the 1991 Constitution of the Republic of Sierra Leone it is stated that Government shall promote the learning of indigenous languages and the study and application of modern science, foreign languages, technology, commerce and business. Information, Communication and Technology (ICT) did not became a core component of the Sierra Leonean education reforms until after the Civil War. It was incorporated in higher educational institutions curricula as a way of enhancing the prospects for job opportunities for graduates. A national ICT policy document was launched in 2007 which emphasizes the importance of technology in the development of the country.

15.1.2 An overview of alcohol and tobacco intake

Alcohol and tobacco use is a risk factor for many diseases, especially those affecting the heart, liver and lungs, as well as many cancers. Alcohol and tobacco are widely used in Sierra Leonean society, as is the case in many Sub-Saharan African countries.

In 2008, the World Health Organization (WHO) named tobacco as the world's single greatest preventable cause of death. Research on tobacco use is limited mainly to smoking, which has been studied extensively. An estimated 1.1 billion people, and up to one-third of the adult population, use tobacco in some form. Smoking is more prevalent among the poor and developing countries and is done more by men than women. According to the Global Status Report on alcohol and health (WHO, 2011), the rates of smoking continue to rise in developing countries, but have leveled off or declined in developed countries. Smoking rates in the United States of America dropped by half from 1965 to 2006, falling to 20.8 per cent of adults. However in the developing world, tobacco consumption is rising by 3.4 per cent every year.

Sierra Leone is a party to the WHO Framework Convention on Tobacco (FCTC), which aims to help countries tackle tobacco's negative impact on development.

The Sierra Leonean Parliament is yet to pass the tobacco bill into law, which will make room for tougher actions. Currently there is no legal minimum age for drinking alcohol or smoking tobacco in Sierra Leone. There is a need to put in place control measures with the aim of reducing their consumption. Increasing taxes and prices of alcohol and tobacco, imposing bans on advertising alcohol and tobacco products, and banning smoking in public places would lead to a reduction in the consumption of those two products.

15.2 Data sources

For the first time, the 2015 Census collected data on access level and usage of Internet services from persons aged 10 years and above. Internet use asked about access in the previous week in their homes, office, Internet café and other places. Data were also collected on tobacco and alcohol intake from persons aged 10 years and older.

15.3 ICT

ICT is very important in the modern world. Many people use the World Wide Web to access news, weather and sports reports, to plan and book vacations and to pursue their personal interests. People use chat, messaging and email to make and stay in touch with friends worldwide, in the same way as some previously had pen pals. Social networking websites such as Facebook, Twitter, and Myspace have created new ways to socialize and interact. Users of these sites are able to add a wide variety of information to pages, to pursue common interests, and to connect with others. It is also possible to find existing acquaintances, allowing communication among existing groups of people. Sites like LinkedIn foster commercial and business connections. YouTube and Flickr specialize in users' videos and photographs. While social networking sites were initially for individuals only, today they are widely used by businesses and other organizations to promote their brands, to market to their customers and to encourage posts to 'go viral'.

At the time of the census enumeration, there were four mobile phone operators in Sierra Leone: Airtel, Africell, Sierratel and Smart Mobile. They were offering Global System for Mobile (GSM) services, on a prepaid basis. Prepaid cards could be purchased throughout the city and in many provincial towns.

Africell Sierra Leone started operations in 2005 and had grown to become the first operator with a 64 per cent market share by the end of 2014. Airtel in Sierra Leone was launched in September 2000 and was the second highest operator with 36 per cent of market share. Sierratel, a state-owned fixed-line incumbent, had entered the mobile market, which it was using to provide fixed-wireless access and broadband services. It had a monopoly on 3G mobile services before other operators launched their own services based on HSPA technology in 2011 and 2012.

Sierra Leone depended entirely on satellites for international connections until February 2013 when it was connected to the submarine cable. This considerably improved bandwidth capabilities, and resulted in a welcome drop in the price of broadband. At the end of 2015, the 600km national backbone network was completed, which also links the country to Liberia and Guinea.

15.3.1 Accessibility of Internet facility

15.3.1.1 Access to Internet facility by age and sex

Overall, the Census showed that 86.7 per cent of the population aged 10 years and over had no access to the Internet (Table 15.1). Only 13 per cent of the population was accessing the Internet. The disaggregation of the population by sex revealed that 16 per cent and 10 per cent of the males and females respectively, were accessing the Internet.

Further disaggregation by broad age group showed that younger people were more likely to be accessing the Internet - 16.4 per cent of persons aged between 15 and 35 years compared to 12.6 per cent of 36 to 60 year-olds. This is probably because the younger generation is more likely to embrace technology faster and could be a result of the Government's efforts since early 2000 to promote the use of ICT.

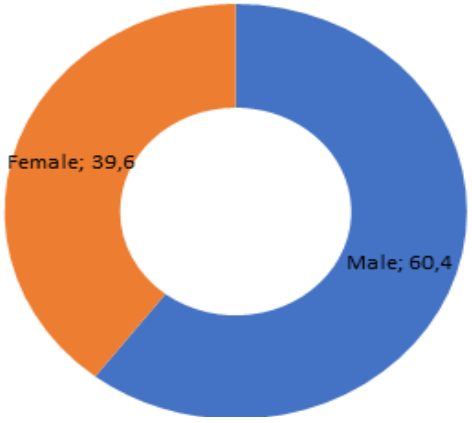
Table 15.1 Distribution of the population aged 10 years and over by status of access to Internet facility and selected characteristics

Sex and broad age group	Total	Have access to Internet facility	Do not have access to Internet facility	Don't Know
Number	5,030,016	651,826	4,359,515	18,675
Percent	100.0	13.0	86.7	0.4
Male	100.0	16.0	83.6	0.4
Female	100.0	10.0	89.6	0.3
Broad age groups				
Total	100.0	13.0	86.7	0.4
10 to 14	100.0	4.4	95.2	0.3
15 to 35	100.0	16.4	83.2	0.4
36 to 60	100.0	12.6	87.0	0.4
Over 60	100.0	5.9	93.6	0.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Figure 15.1 shows the distribution of the population that had access to the Internet by gender. The results revealed that 60.4 per cent of persons who access the Internet were males and 39.6 per cent were females.

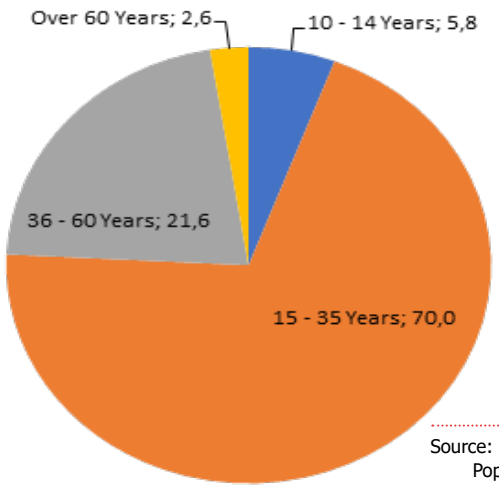
Figure 15.1 Access to Internet by gender of user (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

The distribution of Internet access by age category of user is represented in figure 15.2. It is evident that the biggest proportion (70 per cent) of Internet users was youthful (age range 15-35 years). To most young people all over the world, access to the Internet is a necessity. It is a way of communicating with their peers, a source of learning and knowledge and a way of tapping into opportunities.

Figure 15.2 Access to Internet by age group (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

The distribution of the population aged 10 years and over who were accessing an Internet facility by five-year age group and sex is shown in Table 15.2. Slightly over one fifth of the population accessing the Internet were aged 20 to 24 years. Irrespective of gender, an inverse relationship is revealed between access and the age of the user beyond 24 years.

Table 15.2 Distribution of persons aged 10 years and over who were accessing Internet facility by age group and sex

Age group	Total	Male	Female
Number	651,826	393,763	258,063
Percent	100.0	100.0	100.0
10 - 14	5.8	5.0	6.9
15 - 19	17.5	16.0	19.9
20 - 24	20.6	19.5	22.2
25 - 29	17.3	17.4	17.2
30 - 34	10.7	11.1	10.1
35 - 39	9.0	9.5	8.3
40 - 44	6.0	6.6	5.0
45 - 49	4.7	5.4	3.6
50 - 54	3.2	3.6	2.6
55 - 59	1.9	2.2	1.4
60-64	1.3	1.5	1.1
65+	1.9	2.2	1.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

15.3.1.2 Access to Internet facility by place of residence and sex

The analysis of the data by place of residence revealed better access to the Internet in urban than rural areas (Table 15.3). The findings reflect the way investment in telecommunications is carried out. Preference is usually given to urban areas where there is a concentration of potential clients able to pay for the service.

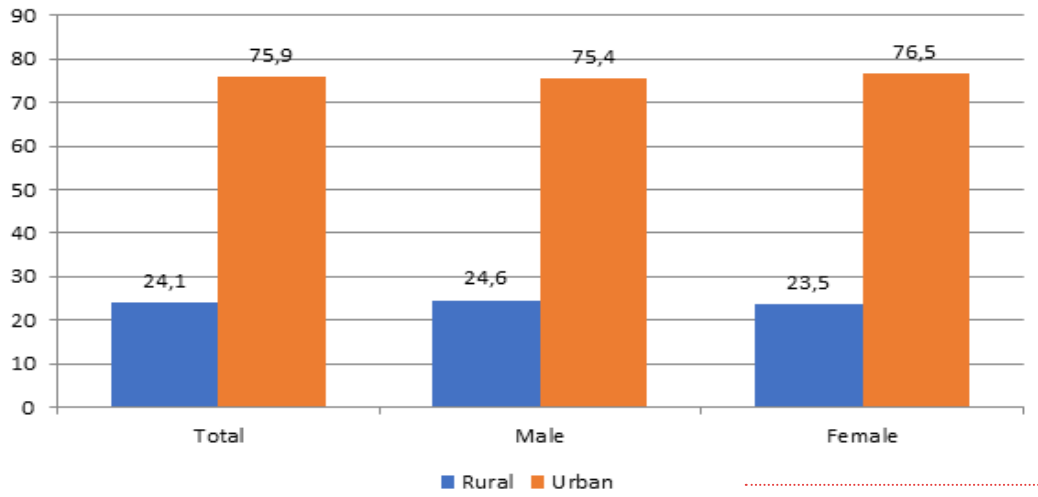
Table 15.3 Distribution of the population aged 10 years and over by status of access to Internet facility and place of residence

Selected Characteristics	Total	Have access to Internet facility	Do not have access to Internet facility	Don't Know
Place of residence				
Number	5,030,016	651,826	4,359,515	18,675
Total (%)	100.0	13.0	86.7	0.4
Rural	100.0	5.5	94.0	0.4
Urban	100.0	22.6	77.1	0.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Three in every four of the population accessing the Internet were urban dwellers (Figure 15.3). As previously stated, this is probably because the market is more attractive to mobile phone or telecommunication providers in cities and towns. An analysis of gender saw little variation in male and female access.

Figure 15.3 Access to Internet by rural-urban distribution (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

15.3.1.3 Access to Internet facility by region, district and sex

At the regional level, the Western Region had more people (25.8 per cent) accessing the Internet at the time of the census enumeration. The lowest percentage was in the Northern and Southern regions. For each of these two regions, only 8.7 per cent of the population aged 10 years above was accessing the Internet.

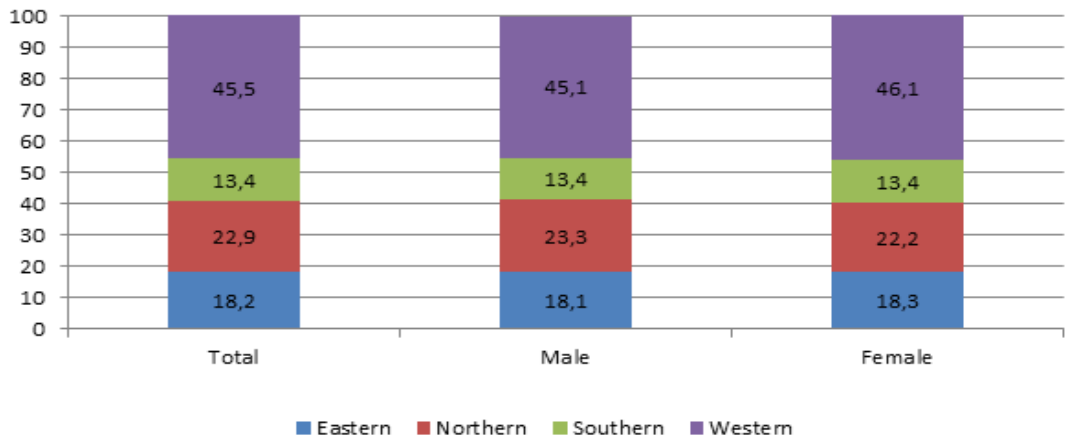
Table 15.4 Distribution of the population aged 10 years and over by status of access to Internet facility and region

Region	Total	Have access to Internet facility	Do not have access to Internet facility	Don't Know
Number	5,030,016	651,826	4,359,515	18,675
Total	100.0	86.7	0.4	0.4
Eastern	100.0	89.5	0.3	0.4
Northern	100.0	90.9	0.4	0.3
Southern	100.0	90.8	0.5	0.5
Western	100.0	73.9	0.3	0.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The results of the analysis of the census data by access to Internet and region presented in Figure 15.4 show that close to half of the Internet users, irrespective of gender, were residing in the Western Region, which has a bigger proportion of the urban population. The findings confirm that the urban dwellers are more likely to adapt to new styles of living faster than their rural counterparts.The Southern Region presented the lowest percentage of the population accessing the Internet. Even after gender considerations, the Southern Region revealed the lowest proportion of the population accessing the Internet.

Figure 15.4 Access to Internet by region (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 15.5 shows the distribution of the population aged 10 years and over by status of access to Internet facility and district. Western Urban (29.2 per cent) presented the highest proportion of the population accessing the Internet facility, followed by Western Rural (17.4 per cent), Kenema (14.8 per cent), and Bombali (11.7 per cent). Koinadugu (4.7 per cent) exhibited the lowest percentage of the population accessing the Internet.

Table 15.5 Distribution of the population aged 10 years and over by status of access to Internet facility and district

District	Total	Have access to Internet facility	Do not have access to Internet facility	Don't Know
Number	5,030,016	651,826	4,359,515	18,675
Total	100.0	13.0	86.7	0.4
Kailahun	100.0	8.6	91.1	0.3
Kenema	100.0	14.8	84.9	0.2
Kono	100.0	6.2	93.5	0.4
Bombali	100.0	11.7	88.2	0.2
Kambia	100.0	6.6	93.3	0.1
Koinadugu	100.0	4.7	94.8	0.5
Port Loko	100.0	11.5	88.2	0.3
Tonkolili	100.0	6.6	92.7	0.7
Bo	100.0	11.4	87.9	0.7
Bonthe	100.0	7.6	91.8	0.6
Moyamba	100.0	5.6	94.2	0.2
Pujehun	100.0	7.6	92.1	0.3
Western Area-Rural	100.0	17.4	82.2	0.5
Western Area-Urban	100.0	29.2	70.6	0.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Further analysis by distribution of the total population accessing the Internet facility by district revealed that Western Urban with 36.8 per cent had the highest percentage share (Table 15.6). The districts with a percentage share of less than five from least to highest were: Bonthe, Moyamba, Koinadugu, Kambia, Pujehun, Kono, Tonkolili and Kailahun. These districts are a long way from Freetown, the capital city. A similar trend was exhibited when the analysis was carried out by gender of the person who was accessing the Internet facility at the time of the census enumeration.

Table 15.6 Distribution of the population aged 10 years and over accessing the Internet facility by district and sex

District	Total	Male	Female
Number	651,826	393,763	258,063
Total	100.0	100.0	100.0
Kailahun	4.9	4.9	4.9
Kenema	9.9	9.6	10.3
Kono	3.4	3.6	3.1
Bombali	7.6	7.5	7.7
Kambia	2.3	2.5	2.1
Koinadugu	2.0	2.0	2.0
Port Loko	7.4	7.5	7.1
Tonkolili	3.6	3.8	3.3
Bo	7.1	7.1	7.1
Bonthe	1.6	1.6	1.6
Moyamba	1.9	1.9	1.8
Pujehun	2.8	2.8	2.9
Western Area Rural	8.8	8.9	8.5
Western Area Urban	36.8	36.2	37.6

Source: Statistics Sierra Leone, 2015 Population and Housing Census

15.3.1.4 Access to Internet facility by selected socio-economic characteristics and sex

Further analysis was carried out on the socio-economic characteristics of the persons who were accessing the Internet facility. The key variables considered are highest educational level attained, employment status and sex. The findings presented in Table 15.7 show that the majority of the persons who reported accessing Internet (36 per cent) had attained up to Senior Secondary School (SSS) level. Among the males, 38 per cent of the population that had attained the SSS level was accessing the Internet, while the corresponding figure for the females is 32.9 per cent. It is revealing to note that even those with no education reported accessing the Internet, forming 13.3 per cent of the total. The proportion of females (16.4 per cent) with no education accessing the Internet was higher than that for the males (11.3 per cent).

Table 15.7 Distribution of persons aged 10 years and over using Internet facility by highest educational level attained and sex

Highest educational level attained	Total	Male	Female
Number	651,826	393,763	258,063
Percent	100.0	100.0	100.0
No education	13.3	11.3	16.4
Kindergarten	2.0	2.0	2.0
Primary	8.7	7.9	9.9
JSS	17.0	16.2	18.2
SSS	36.0	38.0	32.9
Vocational/ Technical/ Nursing/ Teacher	11.1	10.7	11.7
Higher (First Degree)	8.7	9.9	6.8
Tertiary (Post-graduate) and PHD	2.4	2.9	1.7
Koranic	0.5	0.8	0.1
Other	0.3	0.3	0.2
Don't know	0.1	0.1	0.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 15.8 presents the distribution of the population aged 10 years and over who were accessing Internet facility by employment status. The majority of the population (82.3 per cent) accessing the Internet facility are full-time students (39.9 per cent), self-employed without employees (23.7 per cent), and paid employees (18.7 per cent). A similar trend is registered when the comparison is carried out by sex of the Internet user. The five employment status categories with smallest proportion (3.7 per cent) of those accessing the Internet comprise unpaid family workers, paid apprenticeship, unpaid apprenticeship, worked before but currently looking for work, and retired/ pensioners.

Table 15.8 Distribution of the persons aged 10 years and over who are accessing Internet facility by employment status

Employment status	Total	Male	Female
Number	651,826	393,763	258,063
Percent	100.0	100.0	100.0
Paid employee	18.7	22.1	13.5
Self-employed without employees	23.7	23.9	23.5
Self-employed with employees (employer)	2.7	3.1	2.1
Unpaid family worker	1.1	0.9	1.3
Paid apprentice	0.5	0.6	0.2
Unpaid apprentice	0.6	0.7	0.4

Table 15.8 Distribution of the persons aged 10 years and over who are accessing Internet facility by employment status (continued)

Employment status	Total	Male	Female
Worked before but currently looking for work	1.0	1.1	0.7
Looking for work for the first time	3.4	3.7	2.9
Household work	3.7	1.1	7.6
Not working & not looking for work	3.0	2.6	3.6
Full time student	39.9	38.3	42.3
Retired/pensioner	0.5	0.6	0.4
Other (specify)	0.9	0.9	1.0
Don't know	0.3	0.3	0.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

15.3.2 Utilization of Internet facility in the past one week

15.3.2.1 Utilization of Internet facility by age and sex

Respondents who had access to the Internet were asked to state whether they had been online in the past week preceding the census enumeration. Table 15.9 presents the distribution of the population who had access to Internet facility and had used it in the past one week. Generally, irrespective of gender and age, seven in every 10 of the users had accessed the Internet facility from their homes. The percentage of the population accessing the Internet facility from an office was higher for the population aged 36 to 60 years. The proportion of the population that had used the Internet at the office in the past one week preceding the census enumeration varied from 4.3 for those aged 15 to 35 years to 10.3 per cent for the persons aged 36 to 60 years. The proportion of persons who had used the Internet at the office is comparatively higher for the males at 6.4 per cent.

Table 15.9 Distribution of the population accessing the Internet facility by status of using the facility in the past one week and selected characteristics

Selected Characteristics	Total	Used at home	Used at office	Used at Internet cafe	Yes Other	Did not use
Sex						
Number	651,826	475,428	37,623	17,935	37,918	82,922
Percent	100.0	72.9	5.8	2.8	5.8	12.7
Male	100.0	73.2	6.4	2.9	5.8	11.7
Female	100.0	72.5	4.9	2.5	5.8	14.2

Table 15.9 Distribution of the population accessing the Internet facility by status of using the facility in the past one week and selected characteristics (continued)

Selected Characteristics	Total	Used at home	Used at office	Used at Internet cafe	Yes Other	Did not use
Broad Age Group						
10 to 14	100.0	70.1	5.2	2.9	5.7	15.9
15 to 35	100.0	75.0	4.3	2.9	6.3	11.6
36 to 60	100.0	68.1	10.3	2.3	4.6	14.8
Over 60	100.0	64.8	9.7	1.7	3.7	20.0

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 15.10 show the distribution of the persons aged 10 years and over who had used the Internet facility one week preceding the Census enumeration. Slightly over one fifth of the persons who had utilized the Internet facility were aged 20 to 24 years. There is little difference in the proportions of males and females.

Table 15.10 Distribution of the persons aged 10 years and over who had used the Internet facility one week preceding the Census enumeration

Age group	Total	Male	Female
Number	568,904	347,539	221,365
Percent	100.0	100.0	100.0
10 - 14	5.6	4.8	6.7
15 - 19	17.7	16.1	20.2
20 - 24	21.1	20.0	22.8
25 - 29	17.6	17.7	17.5
30 - 34	10.7	11.2	10.0
35 - 39	8.9	9.5	8.1
40 - 44	5.9	6.5	4.9
45 - 49	4.5	5.2	3.4
50 - 54	3.1	3.5	2.5
55 - 59	1.8	2.1	1.4
60-64	1.3	1.4	1.0
65+	1.8	2.0	1.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

15.3.2.2 Utilization of Internet facility by place of residence and sex

Table 15.11 shows that the proportion of rural dwellers (63.7 per cent) using the Internet at home was lower than that for their urban counterparts (75.9 per cent). In contrast, more rural residents were using the Internet at the office.

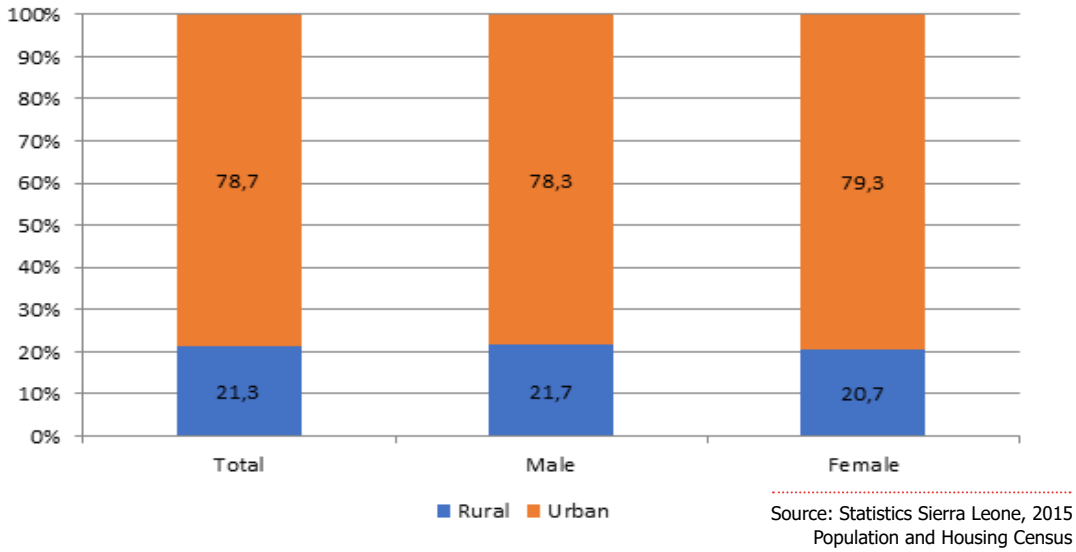
Table 15.11 Distribution of the population accessing the Internet facility by status of using the facility in the past one week and place of residence

Place of residence	Total	Used at home	Used at office	Used at Internet cafe	Yes Other	Did not use
Number	651,826	475,428	37,623	17,935	37,918	82,922
Percent	100.0	72.9	5.8	2.8	5.8	12.7
Rural	100.0	63.7	6.3	2.1	4.9	23.0
Urban	100.0	75.9	5.6	3.0	6.1	9.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Further examination of Internet facility by place of residence revealed that the majority of the users (more than three quarters) were urban residents (Figure 15.5). In comparison, the proportion of female Internet facility users in urban areas was higher than that registered for males.

Figure 15.5 Distribution of the persons aged 10 years and over who had used an Internet facility one week preceding the census enumeration (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

15.3.2.3 Utilization of Internet facility by region, district and sex

At regional level, the results show that the Western Region (75.9 per cent) revealed the highest proportion of Internet facility users who had used it at home (Table 15.12). In comparison, the Southern Region presented the lowest percentage of the population aged 10 years and over who reported having used the Internet facility at home.

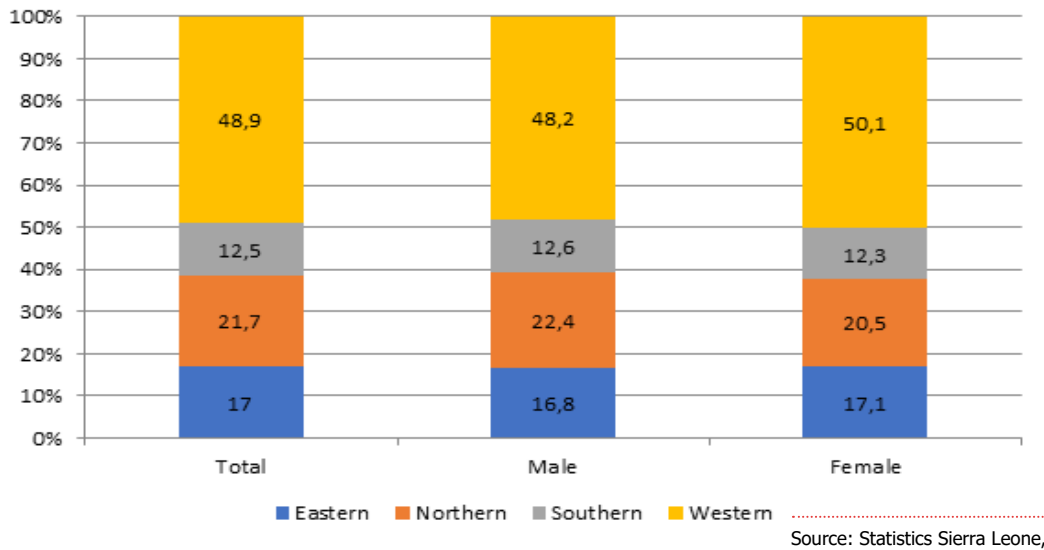
Table 15.12 Distribution of the population accessing the Internet facility by status of using the facility in the past one week and selected characteristics

Region	Total	Used at home	Used at office	Used at Internet cafe	Yes Other	Did not use
Number	651,826	475,428	37,623	17,935	37,918	82,922
Total	100.0	72.9	5.8	2.8	5.8	12.7
Eastern	100.0	70.4	4.6	2.3	4.1	18.7
Northern	100.0	71.1	5.4	1.8	4.2	17.5
Southern	100.0	69.5	5.6	2.2	3.9	18.7
Western	100.0	75.9	6.5	3.6	7.9	6.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Figure 15.6 show the distribution of the Internet facility users by region and sex. Close to half of the total users were residing in the Western Region. A small difference in the proportion of males and females was registered.

Figure 15.6 Utilization of the Internet facility by region and sex (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 15.13 presents the distribution of the population who had access to and had used the Internet facility in the past one week preceding the census enumeration by district of residence. Most of the people had accessed the facility from their homes. The percentage share varied from 64.9 per cent for Kailahun to 77.2 per cent for Port Loko district. The findings presented a shift in the usage of the Internet, given that over 10 years ago most of the users were visiting Internet cafes for the service. The shift has been made possible due to regular improvement in the Internet services by the service providers.

Table 15.13 Distribution of the population accessing the Internet facility by status of using the facility in the past one week and district

District	Total	Used at home	Used at office	Used at Internet cafe	Yes Other	Did not use
Number	651,826	475,428	37,623	17,935	37,918	82,922
Percent	100.0	72.9	5.8	2.8	5.8	12.7
Kailahun	100.0	64.9	4.8	2.8	2.8	24.7
Kenema	100.0	74.7	3.7	2.1	3.8	15.8
Kono	100.0	65.7	6.9	1.9	7.0	18.5
Bombali	100.0	68.0	5.2	2.1	4.5	20.2
Kambia	100.0	68.1	5.4	3.1	3.5	19.8
Koinadugu	100.0	68.6	6.4	1.1	6.8	17.0
Port Loko	100.0	77.2	5.0	1.0	3.0	13.7
Tonkolili	100.0	68.6	6.2	2.1	4.8	18.3
Bo	100.0	70.2	5.3	2.9	4.0	17.7
Bonthe	100.0	70.0	5.7	1.0	3.6	19.7
Moyamba	100.0	71.4	6.8	0.8	3.2	17.8
Pujehun	100.0	66.4	5.8	2.1	4.5	21.2
Western Area-Rural	100.0	76.1	6.7	3.2	4.1	9.9
Western Area-Urban	100.0	75.8	6.4	3.7	8.8	5.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Western Urban had the highest proportion of Internet facility users irrespective of gender (Table 15.14). Four in every 10 persons who had used the Internet facility one week preceding the census enumeration were enumerated here. In contrast, Bonthe district showed the lowest proportion of Internet facility users.

Table 15.14 Distribution of the persons aged 10 years and over who had used the Internet facility one week preceding the census by district and sex

District	Total	Male	Female
Number	568,904	347,539	221,365
Percent	100.0	100.0	100.0
Kailahun	4.2	4.2	4.2
Kenema	9.6	9.3	10.0
Kono	3.2	3.4	2.9
Bombali	6.9	7.0	6.8
Kambia	2.1	2.3	1.8
Koinadugu	1.9	2.0	1.9
Port Loko	7.3	7.5	7.0
Tonkolili	3.4	3.6	3.0
Bo	6.7	6.8	6.6
Bonthe	1.5	1.5	1.4
Moyamba	1.7	1.8	1.7
Pujehun	2.6	2.5	2.6
Western Area Rural	9.0	9.2	8.8
Western Area Urban	39.9	39.0	41.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

15.3.2.4 Utilization of Internet facility by selected socio-economic characteristics and sex

The findings on utilization of Internet facility by highest educational level attained are presented in Table 15.15. Overall, persons who reported their highest level of education as SSS presented the largest proportion of Internet users, constituting 37.7 per cent of the total. The analysis of the data by sex revealed a high proportion among the males (39.5 per cent) for those who reported their highest level of educational attainment as SSS when compared to the females (34.9 per cent). It is interesting to note that close to 11 per cent of the Internet facility users had no formal education at the time of census enumeration.

Table 15.15 Distribution of the persons aged 10 years and over who are using Internet facility by highest educational level attained

Highest educational level attained	Total	Male	Female
Number	568,904	347,539	221,365
Percent	568,904	347,539	221,365
No Education	10.9	9.3	13.4
Kindergarten	1.9	1.9	2.0
Primary	7.9	7.2	9.1
JSS	16.5	15.7	17.7
SSS	37.7	39.5	34.9
Voc/Technical/ Nursing/Teacher	11.9	11.3	12.8
Higher (First Degree)	9.6	10.8	7.7
Tertiary (Post-graduate) & PHD	2.7	3.2	1.9
Koranic	0.4	0.6	0.1
Other	0.3	0.3	0.2
Don't Know	0.1	0.1	0.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 15.16 presents the distribution of persons aged 10 years and over who had used the Internet facility one week preceding the census enumeration. With regard to employment status, the major users of the Internet facility were: full-time students (41.2 per cent), self-employed without employees (21.5 per cent) and paid employees (20.0 per cent). It is worth noting that those three categories formed over four-fifths of the total number of persons who had used the Internet facility one week preceding the Census enumeration.No major variations were noted when the analysis was carried out by gender of user.

Table 15.16 Distribution of the persons aged 10 years and over who had used the Internet facility one week preceding the census enumeration by employment status

Employment status	Total	Male	Female
Number	568,904	347,539	221,365
Percent	100.0	100.0	100.0
Paid employee	20.0	23.3	14.8
Self-employed without employees	21.5	21.8	21.0
Self-employed with employees (employer)	2.7	3.1	2.1
Unpaid family worker	1.0	0.8	1.2

Table 15.16 Distribution of the persons aged 10 years and over who had used the Internet facility one week preceding the census enumeration by employment status (continued)

Employment status	Total	Male	Female
Paid apprentice	0.4	0.6	0.2
Unpaid apprentice	0.6	0.7	0.4
Worked before but currently looking for work	1.0	1.2	0.7
Looking for work for the first time	3.5	3.8	3.1
Household work	3.4	1.0	7.0
Not working & not looking for work	3.0	2.6	3.5
Full time student	41.2	39.4	44.2
Retired/pensioner	0.5	0.5	0.4
Other (specify)	0.9	0.9	1.0
Don't know	0.3	0.3	0.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

15.4 Tobacco and Alcohol Intake

It is important to analyse the census data on tobacco and alcohol intake. Tobacco and alcohol are the leading causes of death, illness and impoverishment. According to a 2014 WHO report, tobacco alone kills more than seven million people each year. More than six million of those deaths are the result of direct tobacco use, while around 890,000 deaths are a result of non-smokers being exposed to the smoke. Non-smokers are often exposed to second-hand smoke in public places like restaurants, bars, buses, offices, and other enclosed spaces. The WHO report further states that in 2004, children accounted for 28 per cent of deaths attributed to second-hand smoke. With regard to alcohol, the WHO statistics report for the year 2010 presented the per capita consumption of alcohol among persons aged 15 years and over. Belarus took the first position with per capita alcohol consumption rate of 14.4 litres per annum, while Pakistan was last in the 191 place with 0.0 litres of alcohol per year. Sierra Leone was ranked 54, with per capita consumption of alcohol of 6.7 litres per year.

15.4.1 Tobacco and alcohol intake by age and sex

Table 15.17 shows the distribution of the population aged 10 years and over by status of tobacco and alcohol intake and selected characteristics. The results revealed that irrespective of the population characteristics, the largest part of the population was neither tobacco nor alcohol users. The results indicated that more men than women used the substances. A clear gender variation was depicted when male percentage shares were compared with those of females. Generally, more tobacco was being consumed than alcohol. Furthermore, the highest consumers were male and the persons were aged over 35 years.

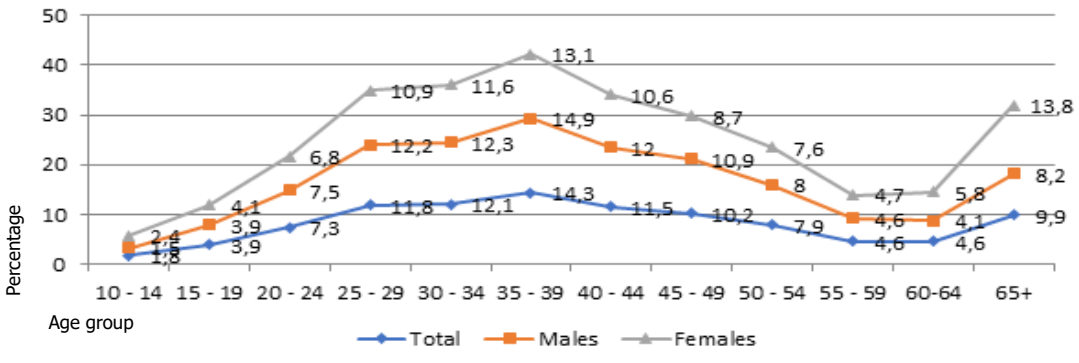
Table 15.17 Distribution of the population aged 10 years and over by status of tobacco and alcohol intake and selected characteristics

Selected characteristics	Overall	Tobacco only	Alcohol only	Both tobacco and alcohol	None	Don't know
Number	5,030,016	456,815	174,414	131,171	4,195,022	72,594
Percent	100.0	9.1	3.5	2.6	83.4	1.4
Male	100.0	12.7	4.3	4.5	77.0	1.5
Female	100.0	5.6	2.6	0.8	89.5	1.4
Broad Age Group						
10 to 14	100.0	0.6	0.9	0.1	95.5	2.9
15 to 35	100.0	6.7	2.9	2.0	87.2	1.2
36 to 60	100.0	18.6	6.2	5.6	68.7	0.9
Over 60	100.0	20.6	6.1	4.0	67.9	1.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The distribution of the persons aged 10 years and over who were using tobacco and alcohol is shown in Figure 15.7. Overall, about one-third of the total number of persons using tobacco and alcohol were female. A significant correlation was noted when the analysis of tobacco and alcohol use was carried out by age group. The majority of the tobacco and alcohol consumers were in the age range 35 to 39 years constituting 14.3 per cent of the total. The disaggregation of the data by sex still confirmed the same age group as having a high proportion of consumers with 14.9 per cent and 13.1 per cent for males and females, respectively. In contrast, the smallest proportion of the tobacco and alcohol consumers was in the age group 10 to 14 years. The rate of tobacco and alcohol consumption increases by age up to 39 years and thereafter decreases.

Figure 15.7 Consumption of tobacco and alcohol by age group (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

15.4.2 Tobacco and alcohol intake by residence and sex

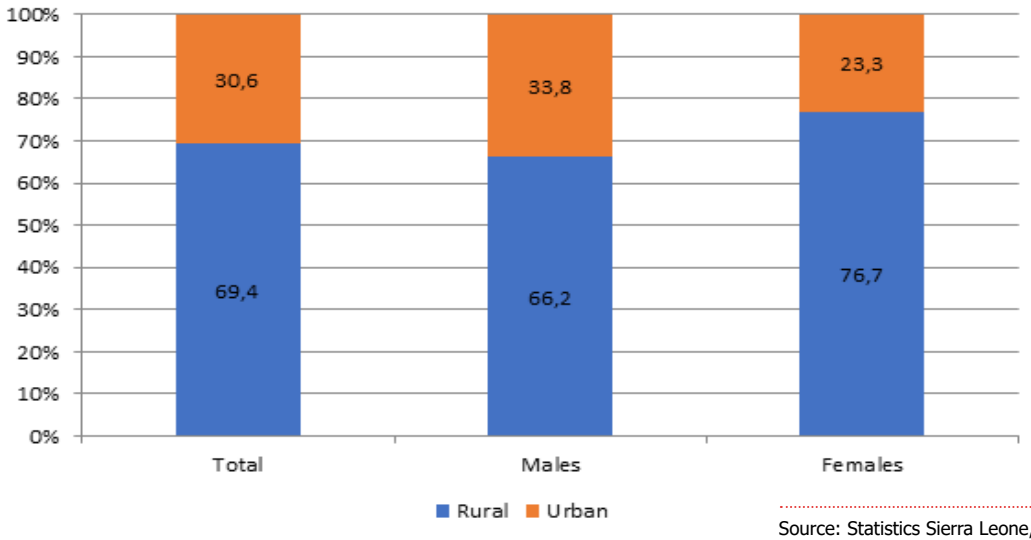
From Table 15.18 and Figure 15.8, it is evident that the consumption of tobacco and alcohol was reported more by rural residents than their urban counterparts. Relatively, the proportion of female consumers of tobacco and alcohol in the rural areas was higher than that of males.

Table 15.18 Distribution of the population aged 10 years and over by status of tobacco and alcohol intake and place of residence

Place of residence	Overall	Tobacco only	Alcohol only	Both tobacco and alcohol	None	Don't know
Number	5,030,016	456,815	174,414	131,171	4,195,022	72,594
Percent	100.0	9.1	3.5	2.6	83.4	1.4
Rural	100.0	12.3	3.6	2.7	79.9	1.4
Urban	100.0	4.9	3.3	2.5	87.9	1.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Figure 15.8 Consumption of tobacco and alcohol by place of residence and sex



Source: Statistics Sierra Leone, 2015 Population and Housing Census

15.4.3 Tobacco and alcohol intake by region, district and sex

At the regional level, the highest proportion of the population aged 10 years and above who were using tobacco only, as shown in Table 15.19, was enumerated in the Southern Region (13 per cent) followed by the Eastern Region with 10.3 per cent. The Western Region presented the lowest percentage of tobacco consumers of 4.5 per cent. The percentage of the alcohol-only users varied from 2.5 per cent in the Eastern Region to 4.3 per cent in the Northern Region.

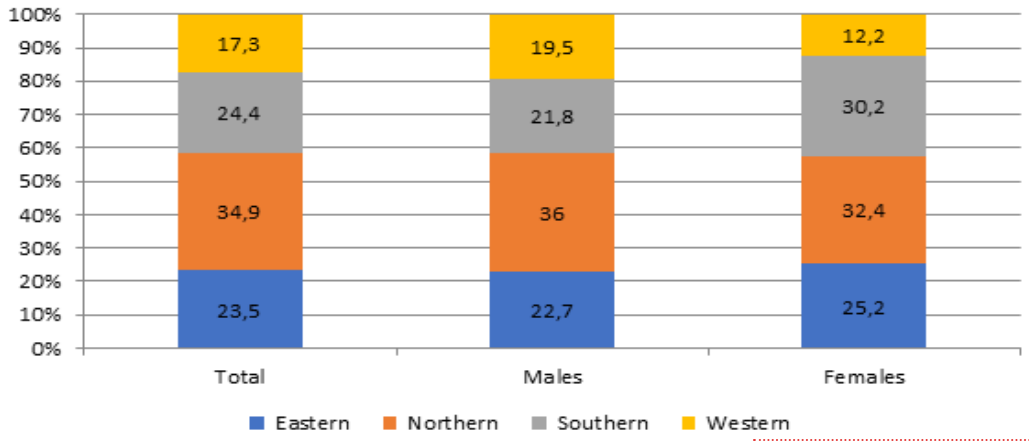
Table 15.19 Distribution of the population aged 10 years and over by status of tobacco and alcohol intake and region

Region	Overall	Tobacco only	Alcohol only	Both tobacco and alcohol	None	Don't know
Number	5,030,016	456,815	174,414	131,171	4,195,022	72,594
Percent	100.0	9.1	3.5	2.6	83.4	1.4
Eastern	100.0	10.3	2.5	2.6	83.1	1.6
Northern	100.0	9.0	4.3	2.2	83.2	1.2
Southern	100.0	13.0	2.6	2.9	80.0	1.5
Western	100.0	4.5	3.9	3.0	87.0	1.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The analysis of the results of the consumption of tobacco and alcohol by region and sex is presented in Figure 15.9. Irrespective of gender, close to one third of consumers were in the Northern Region. The lowest proportion, less than one fifth was in the Western Region. Women consumed comparatively more alcohol and tobacco than men in the Southern and Eastern regions, all though the difference was more pronounced in the Southern Region.

Figure 15.9 Consumption of tobacco and alcohol by region and sex



Source: Statistics Sierra Leone, 2015 Population and Housing Census

The distribution of the population aged 10 years and over by status of tobacco and alcohol intake and district of residence is presented in Table 15.20. For tobacco use, the highest proportion was found in Pujehun and the lowest in Western Urban. The percentage of the alcohol users varied from 0.9 per cent in Pujehun to 7.6 per cent in Bombali. Moyamba district with 4.3 per cent presented the highest percentage of the population consuming both tobacco and alcohol, while Pujehun district presented the lowest proportion (1.2 per cent).

Table 15.20 Distribution of the population aged 10 years and over by status of tobacco and alcohol intake and district of residence

District	Overall	Tobacco only	Alcohol only	Both tobacco and alcohol	None	Don't know
Number	5,030,016	456,815	174,414	131,171	4,195,022	72,594
Percent	100.0	9.1	3.5	2.6	83.4	1.4
Kailahun	100.0	10.4	2.6	2.5	83.2	1.2
Kenema	100.0	14.2	1.7	2.1	80.2	1.9
Kono	100.0	5.5	3.2	3.2	86.4	1.6
Bombali	100.0	7.0	7.6	3.1	81.1	1.2
Kambia	100.0	10.2	1.6	1.9	85.6	0.8
Koinadugu	100.0	5.4	6.5	2.1	84.7	1.2
Port Loko	100.0	11.8	1.4	1.7	83.7	1.3
Tonkolili	100.0	10.2	3.9	2.0	82.3	1.5
Bo	100.0	10.8	3.5	3.4	80.8	1.6
Bonthe	100.0	14.1	1.8	2.2	80.9	1.0
Moyamba	100.0	12.7	3.5	4.3	77.6	1.9
Pujehun	100.0	16.4	0.9	1.2	80.2	1.3
Western Area-Rural	100.0	6.2	3.4	3.1	85.8	1.5
Western Area-Urban	100.0	3.8	4.2	2.9	87.5	1.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Gender differences were noted when analysing tobacco and alcohol consumption by district of residence. For males, the largest proportion of consumers was in Western Area Urban (13.4 per cent), while for females it was Kenema district (12.5 per cent). The smallest proportion of tobacco and alcohol consumers was in Bonthe for males (2.9 per cent) and Kambia for females (2.8 per cent).

Table 15.21 Distribution of persons aged 10 years and over using tobacco and alcohol by district and sex

District	Total	Male	Female
Number	762,400	528,411	233,989
Percent	100.0	100.0	100.0
Kailahun	7.6	7.3	8.4
Kenema	10.2	9.2	12.5
Kono	5.6	6.2	4.3

Table 15.21 Distribution of persons aged 10 years and over using tobacco and alcohol by district and sex (continued)

District	Total	Male	Female
Bombali	9.8	9.6	10.5
Kambia	4.1	4.6	2.8
Koinadugu	5.2	4.7	6.2
Port Loko	8.2	9.0	6.5
Tonkolili	7.5	8.1	6.4
Bo	9.4	8.6	11.3
Bonthe	3.3	2.9	4.1
Moyamba	5.8	5.4	6.7
Pujehun	5.8	4.9	7.9
Western Area Rural	5.5	6.1	4.0
Western Area Urban	11.8	13.4	8.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

15.4.4 Tobacco and alcohol intake by selected socio-economic characteristics and sex

Looking at persons aged 10 years and over who were consuming tobacco and alcohol by highest educational level attained showed that 65.3 per cent of consumers had no formal education (Table 15.22). Taking into consideration gender, 58.6 per cent of males had no education compared with 80.5 per cent of females. Very few consumers had attained up to tertiary education - 0.8 and 0.3 per cent for males and females respectively.

Table 15.22 Distribution of persons aged 10 years and over using tobacco and alcohol by highest educational level attained and sex

Highest educational level attained	Total	Male	Female
Number	762,400	528,411	233,989
Percent	100.0	100.0	100.0
No education	65.3	58.6	80.5
Kindergarten	1.3	1.5	0.9
Primary	9.1	10.0	7.2
JSS	8.8	10.6	4.8
SSS	8.6	10.9	3.6
Vocational/Technical/Nursing/Teacher	2.9	3.5	1.6
Higher (First degree)	1.7	2.1	0.8
Tertiary (Post-graduate) & PHD	0.6	0.8	0.3
Koranic	1.4	1.9	0.1
Other	0.2	0.2	0.1
Don't know	0.1	0.1	0.1

Table 15.23 presents the distribution of the population aged 10 years and over by tobacco and alcohol intake and employment status. Tobacco consumption was most comon amongst the following categories of the population; self-employed without employees (14.8 per cent), self-employed with employees (13.6 per cent), paid apprentice (12.8 per cent), unpaid family workers (12.6 per cent), persons who worked before and now looking for work (12.5 per cent), and retired/ pensioners (12.3 per cent). It is worth noting that a higher proportion of pensioners drank alcohol compared to the other groups.

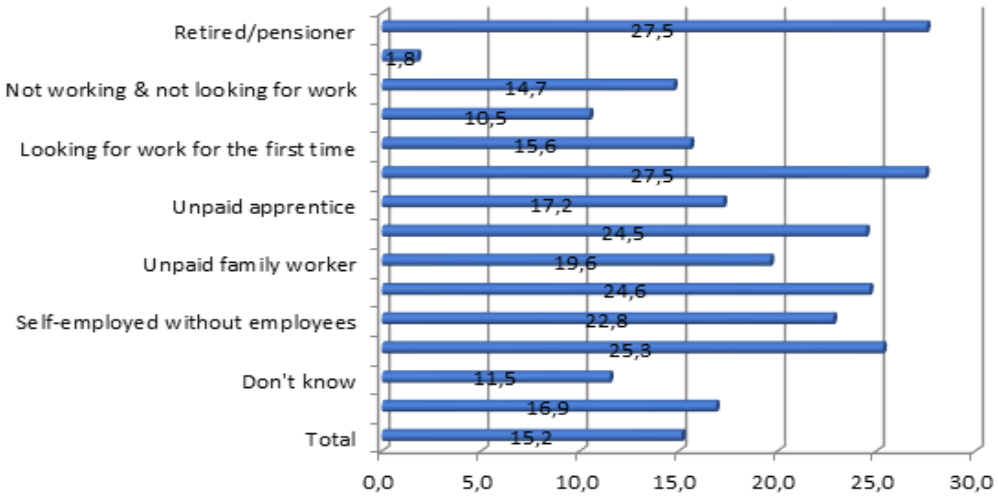
Table 15.23 Distribution of the population aged 10 years and over by status of tobacco and alcohol intake and employment status

Employment Status	Overall	Tobacco only	Alcohol only	Both tobacco and alcohol	None	Don't know
Total	100.0	9.1	3.5	2.6	83.4	1.4
Paid employee	100.0	9.3	9.7	6.3	73.6	1.1
Self employed without employees	100.0	14.8	4.3	3.7	76.0	1.1
Self employed with employees	100.0	13.6	5.9	5.1	73.9	1.5
Unpaid family worker	100.0	12.6	4.0	3.1	79.0	1.4
Paid apprentice	100.0	12.8	4.9	6.7	73.6	1.9
Unpaid apprentice	100.0	10.5	3.2	3.6	80.8	1.9
Worked before but now looking for work	100.0	12.5	7.4	7.5	71.4	1.1
Looking for work first time	100.0	7.6	4.1	4.0	82.9	1.5
Household work	100.0	6.6	2.6	1.3	88.2	1.3
Not working	100.0	9.1	3.0	2.6	83.7	1.6
Full-time student	100.0	0.7	0.9	0.2	96.3	1.9
Retired pensioner	100.0	12.3	10.9	4.3	71.5	1.0
Others	100.0	9.3	3.9	3.7	81.3	1.8
Don't know	100.0	6.9	2.3	2.3	82.3	6.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Two groups were most likely to use tobacco and alcohol: those who had worked before but were looking for work at the time of the enumeration, and those who were retired or pensioners (Figure 15.10). The high percentage for those two categories could be due to redundancy and frustration, and having a lot of time to associate with alcohol consumers and tobacco smokers. The full-time students presented the lowest proportion (1.8 per cent).

Figure 15.10 Tobacco and alcohol in-takers by employment status (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

The analysis of data on tobacco and alcohol intake by employment status reveals that the self-employed without employees are the major consumers, constituting over three fifths of the total, and the same is true when broken down by sex. Paid apprentices were the smallest proportion of tobacco and alcohol consumers.

Table 15.24 Distribution of the persons aged 10 years and over who are using tobacco and alcohol by employment status and sex

Employment status	Total	Male	Female
Number	762,400	528,411	233,989
Per cent	100.0	100.0	100.0
Paid employee	9.1	11.6	3.6
Self-employed without employees	63.9	64.8	62.1
Self-employed with employees (employer)	3.9	4.2	3.4
Unpaid family worker	3.8	3.3	4.9
Paid apprentice	0.5	0.7	0.2
Unpaid apprentice	0.9	1.0	0.7
Worked before but currently looking for work	0.8	1.0	0.3
Looking for work for the first time	2.0	2.4	1.1

Table 15.24 Distribution of the persons aged 10 years and over who are using tobacco and alcohol by employment status and sex (continued)

Employment status	Total	Male	Female
Household work	4.7	1.7	11.6
Not working and not looking for work	4.2	3.4	6.1
Full-time student	3.6	3.7	3.2
Retired/pensioner	0.9	0.8	1.1
Other (specify)	1.3	1.2	1.5
Don't know	0.3	0.3	0.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

15.5 Summary, Conclusions and Recommendations

15.5.1 Summary

The 2015 Census questionnaire was the first census to include questions assessing the accessibility and usage of the Internet in Sierra Leone. A question was also included to provide evidence on the consumption of alcohol and tobacco by those aged 10 years and over.

Overall, more than eight out of ten people had no Internet access. Disaggregating the population by sex showed that a higher proportion of males than females were using the Internet and that 60.4 per cent of Internet users were male and 39.6 per cent were female. Nearly a quarter of the population in urban areas had access to Internet facilities whereas only 5.5 per cent had access in rural areas.

The Western Region had more people (25.8 per cent) accessing the Internet, while the lowest percentages were registered in the Northern and Southern regions. At the district level, Western Urban (29.2 per cent) presented the highest proportion Internet users, followed by Western Rural (17.4 per cent), Kenema (14.8 per cent), and Bombali (11.7 per cent). Koinadugu (4.7 per cent) exhibited the lowest percentage.

People who had attained up to Senior Secondary School (SSS) level were the most likely to use the Internet (36 per cent). Among males, 38 per cent with SSS level were accessing the Internet. The corresponding figure for females was 32.9 per cent. About one in eight of the persons accessing the Internet had never been to school, forming 13.3 per cent of the total. The proportion of females (16.4 per cent) with no education accessing the Internet was higher than that for males (11.3 per cent).

The majority of the population (82.3 per cent) accessing the Internet facility were full-time students (39.9 per cent), self-employed without employees (23.7 per cent), and paid employees (18.7 per cent). A similar pattern is registered when the comparison is carried out by sex. The five employment status categories with the smallest proportion of those accessing the Internet comprise unpaid family workers, paid apprenticeship, unpaid apprenticeship, worked before but currently looking for work, and retired people or pensioners (3.7 per cent).

Most of the respondents who reported having used the Internet in the past one week preceding the census enumeration had used it at home. At the regional level, the results show that Western Region (75.9 per cent) revealed the highest proportion of Internet facility users who had used it at home. In comparison, the Southern Region presented the lowest percentage. Close to half of the total Internet facility users lived in the Western Region.

Western Area Urban district showed the highest proportion of Internet users, irrespective of gender. Four in every 10 persons who had used the Internet facility one week preceding the census enumeration were in Western Urban. In contrast, Bonthe district revealed the lowest proportion of users.

The majority of tobacco and alcohol consumers were aged 35 to 39 years, constituting 14.3 per cent of the total, regardless of sex. In contrast, the smallest proportion of the consumers were aged 10 to 14 years.

At the regional level, the highest proportion of the population using tobacco only were in the Southern Region (13 per cent) followed by Eastern Region (10.3 per cent). The Western Region presented the lowest percentage for tobacco consumers of 4.5 per cent. The percentage of alcohol only users varied from 2.5 per cent in the Eastern Region to 4.3 per cent in the Northern Region.

Pujehun district had the largest proportion (16.4 per cent) and Western Urban the lowest percentage (3.8 per cent) of tobacco only users. The percentage of alcohol users varied from 0.9 per cent in Pujehun to 7.6 per cent in Bombali. Moyamba district with 4.3 per cent presented the highest percentage of the population consuming both tobacco and alcohol, while Pujehun district presented the lowest proportion (1.2 per cent).

The findings revealed that the majority of the consumers (65.3 per cent) had no formal education. Tobacco was most consumed by the: self-employed without employees (14.8 per cent), self-employed with employees (13.6 per cent), paid apprentice (12.8 per cent), unpaid family workers (12.6 per cent), persons who worked before and now looking for work (12.5 per cent), and retired/ pensioners (12.3 per cent).

15.5.2 Conclusion

The ICT sector is essential in the modern world. Many people use the World Wide Web (www)to access information, transact business and make critical decisions. With the www, it is easy to access news, weather forecast reports, to plan and access opportunities for development.

Sierra Leone has embraced ICT transformations, as reflected in the policies and campaigns aimed at ensuring that no one is left behind. The country depended entirely on satellites for international connections until February 2013 when it was connected to the submarine cable. This considerably improved bandwidth capabilities and resulted in a drop in the price of broadband.

The 2015 Census results have revealed that the majority of Internet users were urban residents constituting over three quarters of persons aged 10 years and over. This is an indication that urban residents have better access to the Internet than their rural counterparts. The findings reflect the way investment in telecommunications is carried out. Preference is mainly given to urban areas where there is a concentration of potential clients able to pay for services. The Internet services should be extended to rural areas to enable residents to access information for better standards of living.

Sierra Leone is a party to the WHO Framework Convention on Tobacco (FCTC), which aims to help countries tackle tobacco's negative impact on development. However, there is no law to control the consumption of tobacco and alcohol. The lack of a law means that more people will start or continue to drink alcohol and smoke tobacco. Alcohol and tobacco use is a risk factor for many diseases, especially those affecting the heart, liver, and lungs, as well as many cancers. Alcohol and tobacco are widely used in Sierra Leonean society, as in many Sub Saharan Africa countries.

15.5.3 Recommendations

There is a need for Government to support the Internet service providers to expand facilities to reach the majority of the population, especially in rural areas. The support could be in the form of tax reduction and other incentives, to enable the service providers to deliver affordable packages to their customers.

Service providers should sensitize the masses on the importance of the WWW. ICT training in schools should be enhanced to encourage children and young people to use the Internet. Adult training should also be provided.

With regard to tobacco and alcohol, there is clearly a need to put in place controls to try and reduce consumption. Currently there is no legal minimum age for drinking alcohol or smoking tobacco and legislation is needed to enforce one.

There is also a need to increase taxes and prices of alcohol and tobacco and there should be a ban on advertising products and tobacco smoking in public places. Such measures have been proven in many countries to lead to a reduction in drinking and smoking.

The Government, in collaboration with development partners and civil society, should launch nationwide campaigns to sensitize the masses on the dangers of tobacco and alcohol consumption.

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APPENDIX

Table A15.1 Distribution of the population aged 10 years and over by chiefdom and access to Internet facility

Region/District/ Chiefdom	Access to Internet facility			
	Total	Access Internet	Do not access Internet	Don't Know
SierraLeone	5,030,016	651,826	4,359,515	18,675
EASTERN	1,167,420	118,570	1,045,229	3,621
KAILAHUN	373,668	31,961	340,489	1,218
Dea	8,784	811	7,788	185
Jawie	35,661	3,157	32,454	50
Kissi Kama	14,538	1,689	12,840	9
Kissi Teng	35,066	5,074	29,941	51
Kissi Tongi	34,268	3,209	31,016	43
Kpeje Bongre	19,454	675	18,590	189
Kpeje West	20,182	1,285	18,872	25
Luawa	56,385	7,416	48,793	176
Malema	26,772	1,145	25,320	307
Mandu	21,422	1,469	19,933	20
Njaluahun	41,655	3,243	38,347	65
KENEMA	18,458	582	17,825	51
Dama	18,606	1,558	17,024	24
Dodo	22,417	648	21,746	23
Gaura	435,624	64,566	370,056	1,002
Gorama Mende	21,011	354	20,634	23
Kandu Lekpeama	16,232	1,558	14,658	16
Koya	12,179	575	11,575	29
Langrama	28,875	834	27,976	65
Lower Bambara	12,589	104	12,473	12
Malegohun	9,015	287	8,717	11
Niawa	2,238	216	2,018	4
Nomo	53,881	6,185	47,562	134
Nongowa	15,228	708	14,512	8
Simbaru	5,287	157	5,106	24

Table A15.1 Distribution of the population aged 10 years and over by chiefdom and access to Internet facility (continued)

Region/ District/ Chiefdom	Access to Internet facility			
	Total	Access Internet	Do not access Internet	Don't Know
Small Bo	20,136	772	19,296	68
Tunkia	24,662	1,693	22,910	59
Wandor	14,166	2,466	11,633	67
Kenema City	152,528	45,616	106,486	426
KONO	358,128	22,043	334,684	1,401
Fiama	10,523	227	10,292	4
Gbane	17,272	392	16,798	82
Gbane Kandor	7,565	317	7,244	4
Gbense	10,874	540	10,291	43
Gorama Kono	13,797	565	13,220	12
Kamara	14,286	778	13,405	103
Lei	18,084	509	17,550	25
Mafindor	9,236	118	9,113	5
Nimikoro	43,866	3,581	40,210	75
Nimiyama	19,415	673	18,396	346
Sandor	61,529	2,215	58,991	323
Soa	28,236	353	27,849	34
Tankoro	5,989	107	5,860	22
Toli	3,694	25	3,597	72
Koidu/New	93,762	11,643	81,868	251
NORTHERN	1,709,916	149,291	1,554,251	6,374
BOMBALI	423,778	49,397	373,631	750
Biriwa	30,438	2,036	28,355	47
Bombali Sebora	24,822	2,425	22,354	43
Gbanti-Kamaranka	18,458	1,051	17,385	22
Gbendembu Ngowahun	27,405	798	26,564	43
Libeisaygahun	10,955	651	10,293	11
Magbaimba Ndorhahun	8,538	385	8,146	7
Makari Gbanti	57,092	8,265	48,704	123
Paki Masabong	13,382	398	12,954	30
Safroko Limba	22,053	1,305	20,704	44

Table A15.1 Distribution of the population aged 10 years and over by chiefdom and access to Internet facility (continued)

Region/ District/ Chiefdom	Access to Internet facility			
	Total	Access Internet	Do not access Internet	Don't Know
Sanda Loko	29,827	414	29,387	26
Sanda Tendaren	18,527	1,803	16,713	11
Sella Limba	40,927	9,110	31,768	49
Tambakka	26,143	489	25,620	34
Makeni City	95,211	20,267	74,684	260
KAMBIA	229,379	15,087	214,000	292
Bramaia	23,919	1,516	22,381	22
Gbinle-Dixing	14,954	486	14,457	11
Magbema	64,179	7,310	56,738	131
Mambolo	25,175	1,054	24,086	35
Masungbala	19,437	528	18,890	19
Samu	43,149	2,841	40,267	41
Tonko Limba	38,566	1,352	37,181	33
KOINADUGU	281,559	13,209	266,875	1,475
Dembelia Sinkunia	14,462	1,466	12,908	88
Diang	20,993	770	20,179	44
Follosaba Dembelia	14,984	883	14,048	53
Kasunko	17,253	497	16,722	34
Mongo	32,978	132	32,809	37
Neya	29,122	132	28,957	33
Nieni	52,918	1,193	50,690	1,035
Sengbe	26,007	3,350	22,618	39
Sulima	23,616	114	23,475	27
Wara Wara Bafodia	23,559	178	23,358	23
Wara Wara Yagala	25,667	4,494	21,111	62
PORT LOKO	419,890	48,126	370,376	1,388
BKM	26,649	2,045	24,563	41
Buya Romende	22,340	1,229	21,073	38
Dibia	10,277	423	9,842	12
Kaffu Bullom	87,121	16,542	70,389	190
Koya	58,070	3,191	54,798	81

Table A15.1 Distribution of the population aged 10 years and over by chiefdom and access to Internet facility (continued)

Region/ District/ Chiefdom	Access to Internet facility			
	Total	Access Internet	Do not access Internet	Don't Know
Lokomasama	52,938	5,554	47,307	77
Maforki	59,420	10,550	48,772	98
Marampa	41,451	6,537	34,763	151
Masimera	25,980	811	25,146	23
Sanda Magbolontor	15,718	675	15,028	15
TMS	19,926	569	18,695	662
TONKOLILI	355,310	23,472	329,369	2,469
Gbonkolenken	41,292	3,145	38,071	76
Kafe Simira	26,199	957	24,335	907
Kalansogoia	26,689	2,993	23,572	124
Kholifa Mabang	11,481	1,309	10,144	28
Kolifa Rowalla	45,819	4,537	41,187	95
Kunike Barina	17,600	1,835	15,706	59
Kunike Sanda	47,646	2,120	44,675	851
Malal Mara	18,438	1,052	17,348	38
Sambaya	22,153	634	21,491	28
Tane	21,951	1,071	20,840	40
Yoni	76,042	3,819	72,000	223
SOUTHERN	1,001,795	87,233	909,724	4,838
BO	406,442	46,179	357,437	2,826
Badjia	5,252	80	5,136	36
Bagbo	17,494	267	17,177	50
Bagbwe	14,378	610	13,735	33
Baoma	31,029	1,101	29,880	48
Bumpe Ngawo	30,090	1,755	28,259	76
Gbo	3,698	381	3,308	9
Jaiama-Bongor	20,562	780	18,176	1,606
Kakua	36,283	3,777	32,384	122
Komboya	10,362	641	9,714	7
Lugbu	17,232	815	16,310	107
Niawa Lenga	9,220	292	8,921	7

Table A15.1 Distribution of the population aged 10 years and over by chiefdom and access to Internet facility (continued)

Region/ District/ Chiefdom	Access to Internet facility			
	Total	Access Internet	Do not access Internet	Don't Know
Selenga	6,347	101	6,228	18
Tikonko	37,171	3,640	33,365	166
Valunia	24,262	801	23,351	110
Wunde	10,402	166	10,166	70
Bo City	132,660	30,972	101,327	361
BONTHE	138,265	10,528	126,868	869
Bendu Cha	4,780	363	4,401	16
Bum	15,909	335	15,245	329
Dema	5,300	154	5,137	9
Imperi	23,871	2,559	21,261	51
Jong	23,457	2,814	20,614	29
Kpanga Kemo	7,116	327	6,782	7
Kwamebai Krim	8,963	76	8,685	202
Nongoba Bullom	13,217	477	12,688	52
Sittia	15,245	174	14,913	158
Sogbini	7,451	920	6,521	10
Yawbeko	4,980	518	4,459	3
Bonthe Municipal	7,976	1,811	6,162	3
MOYAMBA	216,236	12,101	203,696	439
Bagruwa	18,834	560	18,241	33
Bumpeh	24,329	1,268	23,016	45
Dasse	8,949	644	8,293	12
Fakunya	18,647	606	18,029	12
Kagboro	23,467	979	22,422	66
Kaiyamba	18,408	1,665	16,709	34
Kamajei	6,719	279	6,434	6
Kongbora	7,084	474	6,599	11
Kori	21,590	1,239	20,298	53
Kowa	6,665	228	6,427	10
Lower Banta	26,325	2,659	23,623	43
Ribbi	21,259	1,175	19,987	97

Table A15.1 Distribution of the population aged 10 years and over by chiefdom and access to Internet facility (continued)

Region/ District/ Chiefdom	Access to Internet facility			
	Total	Access Internet	Do not access Internet	Don't Know
Timdale	6,832	105	6,713	14
Upper Banta	7,128	220	6,905	3
PUJEHUN	240,852	18,425	221,723	704
Barri	25,929	3,325	22,579	25
Gallinas Peri	37,831	1,300	36,479	52
Kpaka	11,174	697	10,448	29
Kpanga-Kabonde	34,351	2,747	31,415	189
Makpele	21,038	3,147	17,763	128
Malen	36,425	3,818	32,499	108
Mano Sakrim	8,613	334	8,226	53
Panga Krim	5,980	373	5,594	13
Pejeh	9,231	213	9,003	15
Soro Gbema	28,658	1,582	27,013	63
Sowa	12,319	204	12,093	22
YKK	9,303	685	8,611	7
WESTERN	1,150,885	296,732	850,311	3,842
WESTERN AREA RURAL	328,748	57,038	270,229	1,481
Koya	50,383	4,696	45,578	109
Mountain	23,208	6,372	16,785	51
Waterloo	157,986	27,126	130,103	757
York Rural	97,171	18,844	77,763	564
WESTERN AREA URBAN	822,137	239,694	580,082	2,361
Central 1	49,335	16,071	33,122	142
Central 2	15,895	5,585	10,269	41
East 1	48,117	12,898	35,061	158
East 2	69,857	18,907	50,774	176
East 3	344,664	86,161	257,381	1,122
West 1	42,711	14,520	28,084	107
West 2	102,538	32,449	69,830	259
West 3	149,020	53,103	95,561	356

Table A15.2 Distribution of the population aged 10 years and over by chiefdom and status of access to Internet facility in the past one week

Region/ District/ Chiefdom	Internet usage in the past one week					
	Total	Yes at home	Yes at office	Yes Internet cafe	Yes other	No
SierraLeone	651,826	475,428	37,623	17,935	37,918	82,922
EASTERN	118,570	83,463	5,417	2,676	4,883	22,131
KAILAHUN	31,961	20,749	1,524	903	894	7,891
Dea	811	579	47	11	69	105
Jawie	3,157	1,666	127	142	69	1,153
Kissi Kama	1,689	978	52	6	37	616
Kissi Teng	5,074	4,304	89	9	103	569
Kissi Tongi	3,209	1,663	199	346	49	952
Kpeje Bongre	675	405	58	26	27	159
Kpeje West	1,285	913	69	11	186	106
Luawa	7,416	5,068	310	55	119	1,864
Malema	1,145	583	95	73	88	306
Mandu	1,469	572	86	48	35	728
Njaluahun	3,243	2,187	199	97	28	732
Penguia	582	288	72	60	2	160
Upper Bambara	1,558	1,068	68	14	10	398
Yawei	648	475	53	5	72	43
KENEMA	64,566	48,236	2,364	1,350	2,443	10,173
Dama	354	106	46	21	99	82
Dodo	1,558	868	26	3	82	579
Gaura	575	200	28	2	9	336
Gorama Mende		571	64	12	26	161
Kandu Lekpeama	104	43	18	4	6	33
Koya	287	81	29	2	19	156
Langrama	216	204	3	3	2	4
Lower Bambara	6,185	3,625	177	104	629	1,650
Malegohun	708	382	42	4	10	270
Niawa	157	76	21	8	21	31
Nomo	10	6	3	-	-	1
Nongowa	2,387	1,407	88	25	130	737

Table A15.2 Distribution of the population aged 10 years and over by chiefdom and status of access to Internet facility in the past one week (continued)

Region/ District/ Chiefdom	Internet usage in the past one week					
	Total	Yes at home	Yes at office	Yes Internet cafe	Yes other	No
Simbaru	644	327	37	3	17	260
Small Bo	772	542	81	50	12	87
Tunkia	1,693	984	141	49	113	406
Wandor	2,466	1,543	60	28	266	569
Kenema City	45,616	37,271	1,500	1,032	1,002	4,811
KONO	22,043	14,478	1,529	423	1,546	4,067
Fiama	227	67	20	1	-	139
Gbane	392	234	50	10	28	70
Gbane Kandor	317	66	15	1	2	233
Gbense	540	418	26	14	44	38
Gorama Kono	565	280	50	75	3	157
Kamara	778	315	55	30	42	336
Lei	509	232	51	3	27	196
Mafindor	118	45	13	6	-	54
Nimikoro	3,581	2,154	114	61	680	572
Nimiyama	673	541	78	4	13	37
Sandor	2,215	1,138	196	31	196	654
Soa	353	166	63	10	12	102
Tankoro	107	76	13	4	-	14
Toli	25	15	3	-	-	7
Koidu/New	11,643	8,731	782	173	499	1,458
NORTHERN	149,291	106,188	8,106	2,665	6,234	26,098
BOMBALI	49,397	33,604	2,556	1,058	2,217	9,962
Biriwa	2,036	1,345	116	9	19	547
Bombali Sebora	2,425	1,596	158	11	79	581
Gbanti-Kamaranka	1,051	555	74	68	20	334
Gbendembu Ngowahun	798	354	101	5	20	318
Libeisaygahun	651	410	31	-	4	206
Magbaimba Ndorhahun	385	146	74	114	-	51
Makari Gbanti	8,265	5,360	454	164	360	1,927

Table A15.2 Distribution of the population aged 10 years and over by chiefdom and status of access to Internet facility in the past one week (continued)

Region/ District/ Chiefdom	Internet usage in the past one week					
	Total	Yes at home	Yes at office	Yes Internet cafe	Yes other	No
Paki Masabong	398	146	60	8	50	134
Safroko Limba	1,305	580	79	28	310	308
Sanda Loko	414	268	43	15	29	59
Sanda Tendaren	1,803	1,614	62	55	9	63
Sella Limba	9,110	7,290	153	32	204	1,431
Tambakka	489	61	97	2	2	327
Makeni City	20,267	13,879	1,054	547	1,111	3,676
KAMBIA	15,087	10,281	816	468	532	2,990
Bramaia	1,516	970	60	22	95	369
Gbinle-Dixing	486	404	44	5	8	25
Magbema	7,310	4,433	462	346	104	1,965
Mambolo	1,054	926	43	3	42	40
Masungbala	528	433	42	1	9	43
Samu	2,841	2,158	90	55	235	303
Tonko Limba	1,352	957	75	36	39	245
KOINADUGU	13,209	9,057	849	148	904	2,251
Dembelia Sinkunia	1,466	889	53	10	9	505
Diang	770	565	72	16	7	110
Follosaba Dembelia	883	470	18	1	347	47
Kasunko	497	405	36	4	7	45
Mongo	132	30	54	3	1	44
Neya	132	52	56	4	-	20
Nieni	1,193	648	133	30	94	288
Sengbe	3,350	2,748	138	8	54	402
Sulima	114	37	35	27	1	14
Wara Wara Bafodia	178	14	43	12	13	96
Wara Wara Yagala	4,494	3,199	211	33	371	680
PORT LOKO	48,126	37,151	2,425	492	1,451	6,607
BKM	2,045	1,365	95	41	221	323

Table A15.2 Distribution of the population aged 10 years and over by chiefdom and status of access to Internet facility in the past one week (continued)

Region/ District/ Chiefdom	Internet usage in the past one week					
	Total	Yes at home	Yes at office	Yes Internet cafe	Yes other	No
Buya Romende	1,229	612	86	10	137	384
Dibia	423	362	22	6	7	26
Kaffu Bullom	16,542	14,129	616	166	99	1,532
Koya	3,191	2,041	281	131	145	593
Lokomasama	5,554	3,480	436	19	35	1,584
Maforki	10,550	8,351	380	69	617	1,133
Marampa	6,537	5,336	312	36	110	743
Masimera	811	512	69	3	20	207
Sanda Magbolontor	675	589	62	4	2	18
TMS	569	374	66	7	58	64
TONKOLILI	23,472	16,095	1,460	499	1,130	4,288
Gbonkolenken	3,145	2,539	143	35	43	385
Kafe Simira	957	481	111	18	67	280
Kalansogoia	2,993	2,115	192	86	350	250
Kholifa Mabang	1,309	1,047	39	5	2	216
Kolifa Rowalla	4,537	3,054	204	98	202	979
Kunike Barina	1,835	1,153	80	9	244	349
Kunike Sanda	2,120	1,412	172	40	28	468
Malal Mara	1,052	748	71	17	13	203
Sambaya	634	432	52	13	8	129
Tane	1,071	359	84	15	13	600
Yoni	3,819	2,755	312	163	160	429
SOUTHERN	87,233	60,650	4,922	1,943	3,431	16,287
BO	46,179	32,406	2,438	1,351	1,827	8,157
Badjia	80	21	10	1	12	36
Bagbo	267	152	47	19	4	45
Bagbwe	610	330	52	9	12	207
Baoma	1,101	604	91	24	39	343

Table A15.2 Distribution of the population aged 10 years and over by chiefdom and status of access to Internet facility in the past one week (continued)

Region/ District/ Chiefdom	Internet usage in the past one week					
	Total	Yes at home	Yes at office	Yes Internet cafe	Yes other	No
Bumpe Ngawo	1,755	636	184	35	15	885
Gbo	381	116	10	1	5	249
Jaiama-Bongor	780	497	60	41	77	105
Kakua	3,777	2,779	246	103	180	469
Komboya	641	387	48	9	79	118
Lugbu	815	503	42	16	12	242
Niawa Lenga	292	219	25	7	1	40
Selenga	101	53	10	4	3	31
Tikonko	3,640	2,417	220	84	102	817
Valunia	801	355	76	38	40	292
Wunde	166	72	30	19	5	40
Bo City	30,972	23,265	1,287	941	1,241	4,238
BONTHE	10,528	7,367	597	109	382	2,073
Bendu Cha	363	285	12	15	33	18
Bum	335	159	55	12	9	100
Dema	154	44	15	7	2	86
Imperi	2,559	1,927	145	27	141	319
Jong	2,814	1,746	201	13	25	829
Kpanga Kemo	327	190	12	3	3	119
Kwamebai Krim	76	27	9	15	5	20
Nongoba Bullom	477	151	48	11	18	249
Sittia	174	107	23	1	1	42
Sogbini	920	605	33	2	140	140
Yawbeko	518	381	15	-	1	121
Bonthe Municipal	1,811	1,745	29	3	4	30

Table A15.2 Distribution of the population aged 10 years and over by chiefdom and status of access to Internet facility in the past one week (continued)

Region/ District/ Chiefdom	Internet usage in the past one week					
	Total	Yes at home	Yes at office	Yes Internet cafe	Yes other	No
MOYAMBA	12,101	8,644	826	97	384	2,150
Bagruwa	560	428	37	16	22	57
Bumpeh	1,268	909	54	2	5	298
Dasse	644	280	45	3	7	309
Fakunya	606	473	43	24	1	65
Kagboro	979	551	57	6	16	349
Kaiyamba	1,665	1,221	146	8	40	250
Kamajei	279	207	26	3	4	39
Kongbora	474	113	34	10	6	311
Kori	1,239	961	104	12	55	107
Kowa	228	158	20	1	3	46
Lower Banta	2,659	2,332	156	6	10	155
Ribbi	1,175	800	58	4	205	108
Timdale	105	69	13	1	1	21
Upper Banta	220	142	33	1	9	35
PUJEHUN	18,425	12,233	1,061	386	838	3,907
Barri	3,325	2,438	91	13	32	751
Gallinas Peri	1,300	625	99	73	69	434
Kpaka	697	443	72	20	10	152
Kpanga-Kabonde	2,747	1,811	187	48	410	291
Makpele	3,147	2,385	67	41	150	504
Malen	3,818	2,676	249	92	95	706
Mano Sakrim	334	180	51	42	35	26
Panga Krim	373	236	45	23	3	66
Pejeh	213	132	32	11	1	37
Soro Gbema	1,582	889	98	12	25	558
Sowa	204	113	41	2	7	41
YKK	685	305	29	9	1	341

Table A15.2 Distribution of the population aged 10 years and over by chiefdom and status of access to Internet facility in the past one week (continued)

Region/ District/ Chiefdom	Internet usage in the past one week					
	Total	Yes at home	Yes at office	Yes Internet cafe	Yes other	No
WESTERN	296,732	225,127	19,178	10,651	23,370	18,406
WESTERN AREA RURAL	57,038	43,405	3,835	1,806	2,327	5,665
Koya	4,696	3,340	320	199	159	678
Mountain	6,372	4,941	718	257	256	200
Waterloo	27,126	20,536	1,615	835	1,114	3,026
York Rural	18,844	14,588	1,182	515	798	1,761
WESTERN AREA URBAN	239,694	181,722	15,343	8,845	21,043	12,741
Central 1	16,071	11,875	951	415	1,749	1,081
Central 2	5,585	3,866	561	232	684	242
East 1	12,898	9,885	621	470	946	976
East 2	18,907	14,357	844	844	1,758	1,104
East 3	86,161	66,369	4,585	2,692	7,544	4,971
West 1	14,520	10,824	940	766	1,354	636
West 2	32,449	23,754	2,689	1,792	2,610	1,604
West 3	53,103	40,792	4,152	1,634	4,398	2,127

Table A15.3 Distribution of the population aged 10 years and over by chiefdom and status of tobacco and alcohol intake facility in the past one week

Region/ District/ Chiefdom	Tobacco and/or alcohol intake					
	Total	Tobacco only	Alcohol only	Both Tobacco and Alcohol	None	Don't Know
SierraLeone	5,030,016	456,815	174,414	131,171	4,195,022	72,594
EASTERN	1,167,420	120,386	28,742	29,964	969,794	18,534
KAILAHUN	373,668	38,935	9,889	9,372	311,055	4,417
Dea	8,784	1,340	82	104	7,197	61
Jawie	35,661	5,263	354	649	28,884	511
Kissi Kama	14,538	391	1,155	502	12,340	150
Kissi Teng	35,066	935	2,166	1,168	30,550	247
Kissi Tongi	34,268	1,790	1,621	1,315	29,259	283
Kpeje Bongre	19,454	1,879	331	458	16,670	116
Kpeje West	20,182	2,045	374	409	17,133	221
Luawa	56,385	5,969	921	1,235	47,207	1,053
Malema	26,772	4,151	614	491	21,282	234
Mandu	21,422	2,924	215	268	17,793	222
Njaluahun	41,655	5,420	830	1,278	33,456	671
Penguia	18,458	1,564	382	594	15,746	172
Upper Bambara	18,606	2,158	308	351	15,558	231
Yawei	22,417	3,106	536	550	17,980	245
KENEMA	435,624	61,663	7,296	9,181	349,246	8,238
Dama	21,011	5,448	181	268	14,347	767
Dodo	16,232	3,678	208	287	11,935	124
Gaura	12,179	3,775	110	123	7,917	254
Gorama Mende	28,875	4,103	551	816	23,140	265
Kandu Lekpeama	12,589	2,312	261	399	9,476	141
Koya	9,015	2,125	96	169	6,531	94
Langrama	2,238	338	32	46	1,765	57
Lower Bambara	53,881	9,868	1,031	1,852	40,366	764

Table A15.3 Distribution of the population aged 10 years and over by chiefdom and status of tobacco and alcohol intake facility in the past one week (continued)

Region/ District/ Chiefdom	Tobacco and/or alcohol intake					
	Total	Tobacco only	Alcohol only	Both Tobacco and Alcohol	None	Don't Know
Malegohun	15,228	2,802	341	816	10,995	274
Niawa	5,287	1,011	37	65	4,129	45
Nomo	3,771	1,010	16	47	2,676	22
Nongowa	31,816	5,917	523	773	24,279	324
Simbaru	12,010	1,980	294	367	9,253	116
Small Bo	20,136	3,970	249	324	15,082	511
Tunkia	24,662	4,969	190	150	19,016	337
Wandor	14,166	2,207	332	494	10,995	138
Kenema City	152,528	6,150	2,844	2,185	137,344	4,005
KONO	358,128	19,788	11,557	11,411	309,493	5,879
Fiama	10,523	311	329	201	9,595	87
Gbane	17,272	827	489	555	15,001	400
Gbane Kandor	7,565	504	393	321	6,260	87
Gbense	10,874	516	529	472	8,773	584
Gorama Kono	13,797	982	384	550	11,784	97
Kamara	14,286	970	688	643	11,824	161
Lei	18,084	881	518	563	15,988	134
Mafindor	9,236	453	290	565	7,866	62
Nimikoro	43,866	3,057	2,197	2,050	35,845	717
Nimiyama	19,415	2,197	868	880	15,141	329
Sandor	61,529	4,058	1,473	1,558	53,498	942
Soa	28,236	1,045	817	907	25,007	460
Tankoro	5,989	252	338	258	5,006	135
Toli	3,694	185	80	68	3,332	29
Koidu/New	93,762	3,550	2,164	1,820	84,573	1,655
Lower Bambara	53,881	9,868	1,031	1,852	40,366	764
NORTHERN	1,709,916	154,228	74,012	37,745	1,422,618	21,313
BOMBALI	423,778	29,578	32,190	13,274	343,848	4,888
Biriwa	30,438	960	7,016	1,547	20,554	361
Bombali Sebora	24,822	2,472	803	820	20,338	389

Table A15.3 Distribution of the population aged 10 years and over by chiefdom and status of tobacco and alcohol intake facility in the past one week (continued)

Region/ District/ Chiefdom	Tobacco and/or alcohol intake					
	Total	Tobacco only	Alcohol only	Both Tobacco and Alcohol	None	Don't Know
Gbanti-Kamaranka	18,458	1,795	133	199	16,033	298
Gbendembu Ngowahun	27,405	1,229	3,157	1,270	20,883	866
Libeisaygahun	10,955	1,566	162	295	8,826	106
Magbaimba Ndorhahun	8,538	366	1,257	605	6,241	69
Makari Gbanti	57,092	4,709	1,619	1,546	48,431	787
Paki Masabong	13,382	869	2,120	607	9,639	147
Safroko Limba	22,053	440	8,434	1,446	11,535	198
Sanda Loko	29,827	3,182	889	683	24,846	227
Sanda Tendaren	18,527	1,736	208	251	16,190	142
Sella Limba	40,927	1,847	2,792	1,649	34,324	315
Tambakka	26,143	3,605	168	216	21,906	248
Makeni City	95,211	4,802	3,432	2,140	84,102	735
KAMBIA	229,379	23,310	3,567	4,247	196,390	1,865
Bramaia	23,919	2,460	95	107	21,036	221
Gbinle-Dixing	14,954	1,986	102	230	12,486	150
Magbema	64,179	5,670	1,011	894	56,049	555
Mambolo	25,175	2,874	109	246	21,769	177
Masungbala	19,437	2,072	77	180	16,906	202
Samu	43,149	5,685	187	488	36,471	318
Tonko Limba	38,566	2,563	1,986	2,102	31,673	242
KOINADUGU	281,559	15,306	18,191	5,944	238,619	3,499
Dembelia Sinkunia	14,462	670	114	170	13,206	302
Diang	20,993	1,477	953	677	17,706	180
Follosaba Dembelia	14,984	832	400	142	13,506	104
Kasunko	17,253	473	4,973	1,103	10,563	141
Mongo	32,978	2,093	313	308	29,490	774

Table A15.3 Distribution of the population aged 10 years and over by chiefdom and status of tobacco and alcohol intake facility in the past one week (continued)

Region/ District/ Chiefdom	Tobacco and/or alcohol intake					
	Total	Tobacco only	Alcohol only	Both Tobacco and Alcohol	None	Don't Know
Neya	29,122	1,943	223	302	26,354	300
Nieni	52,918	3,653	1,134	1,025	46,534	572
Sengbe	26,007	1,197	234	294	23,994	288
Sulima	23,616	1,544	254	186	21,341	291
Wara Wara Bafodia	23,559	606	6,573	1,028	15,073	279
Wara Wara Yagala	25,667	818	3,020	709	20,852	268
PORT LOKO	419,890	49,753	6,079	7,054	351,385	5,619
BKM	26,649	2,966	222	409	22,775	277
Buya Romende	22,340	3,485	182	359	18,134	180
Dibia	10,277	1,394	57	119	8,529	178
Kaffu Bullom	87,121	5,333	1,767	1,618	77,374	1,029
Koya	58,070	8,760	1,131	1,060	46,310	809
Lokomasama	52,938	7,628	489	708	43,213	900
Maforki	59,420	6,995	771	1,022	49,904	728
Marampa	41,451	4,008	816	946	35,108	573
Masimera	25,980	4,650	103	266	20,745	216
Sanda Magbolontor	15,718	1,589	408	428	13,158	135
TMS	19,926	2,945	133	119	16,135	594
TONKOLILI	355,310	36,281	13,985	7,226	292,376	5,442
Gbonkolenken	41,292	4,047	506	836	35,356	547
Kafe Simira	26,199	2,793	4,553	1,329	17,141	383
Kalansogoia	26,689	1,139	6,020	1,276	17,937	317
Kholifa Mabang	11,481	1,560	112	115	9,419	275
Kolifa Rowalla	45,819	3,816	819	929	39,645	610
Kunike Barina	17,600	3,230	229	331	13,369	441
Kunike Sanda	47,646	4,901	424	558	41,395	368

Table A15.3 Distribution of the population aged 10 years and over by chiefdom and status of tobacco and alcohol intake facility in the past one week (continued)

Region/ District/ Chiefdom	Tobacco and/or alcohol intake					
	Total	Tobacco only	Alcohol only	Both Tobacco and Alcohol	None	Don't Know
Malal Mara	18,438	2,527	109	237	15,345	220
Sambaya	22,153	1,623	239	329	19,508	454
Tane	21,951	2,875	306	433	18,042	295
Yoni	76,042	7,770	668	853	65,219	1,532
SOUTHERN	1,001,795	130,266	26,353	29,060	801,084	15,032
BO	406,442	43,716	14,147	13,978	328,298	6,303
Badjia	5,252	947	251	339	3,679	36
Bagbo	17,494	3,376	239	314	13,281	284
Bagbwe	14,378	2,277	593	777	10,418	313
Baoma	31,029	4,878	532	919	24,067	633
Bumpe Ngawo	30,090	4,925	1,214	1,513	21,805	633
Gbo	3,698	425	360	522	2,363	28
Jaiama-Bongor	20,562	4,359	234	457	15,209	303
Kakua	36,283	2,621	2,010	1,542	29,502	608
Komboya	10,362	1,463	584	796	7,425	94
Lugbu	17,232	3,300	153	337	12,888	554
Niawa Lenga	9,220	1,069	686	433	6,894	138
Selenga	6,347	523	550	564	4,431	279
Tikonko	37,171	4,004	1,279	1,450	30,029	409
Valunia	24,262	3,634	1,090	1,641	17,450	447
Wunde	10,402	1,916	91	92	8,222	81
Bo City	132,660	3,999	4,281	2,282	120,635	1,463
BONTHE	138,265	19,564	2,474	3,040	111,804	1,383
Bendu Cha	4,780	851	28	59	3,809	33
Bum	15,909	3,451	160	318	11,811	169
Dema	5,300	667	151	258	4,188	36
Imperi	23,871	2,027	658	619	20,297	270
Jong	23,457	2,869	532	448	19,425	183

Table A15.3 Distribution of the population aged 10 years and over by chiefdom and status of tobacco and alcohol intake facility in the past one week (continued)

Region/ District/ Chiefdom	Tobacco and/or alcohol intake					
	Total	Tobacco only	Alcohol only	Both Tobacco and Alcohol	None	Don't Know
Kpanga Kemo	7,116	999	103	144	5,766	104
Kwamebai Krim	8,963	1,653	129	269	6,808	104
Nongoba Bullom	13,217	2,678	107	161	10,084	187
Sittia	15,245	2,097	131	305	12,546	166
Sogbini	7,451	895	120	186	6,203	47
Yawbeko	4,980	901	55	133	3,839	52
Bonthe Municipal	7,976	476	300	140	7,028	32
MOYAMBA	216,236	27,485	7,533	9,209	167,835	4,174
Bagruwa	18,834	2,384	455	628	15,097	270
Bumpeh	24,329	3,914	331	475	19,057	552
Dasse	8,949	1,605	408	624	6,201	111
Fakunya	18,647	1,730	732	902	15,054	229
Kagboro	23,467	3,425	329	630	18,649	434
Kaiyamba	18,408	1,184	1,285	927	14,667	345
Kamajei	6,719	806	652	821	4,241	199
Kongbora	7,084	854	531	472	5,176	51
Kori	21,590	1,970	1,288	1,639	16,185	508
Kowa	6,665	887	403	614	4,458	303
Lower Banta	26,325	2,965	722	682	21,724	232
Ribbi	21,259	3,339	135	291	16,833	661
Timdale	6,832	979	103	295	5,247	208
Upper Banta	7,128	1,443	159	209	5,246	71
PUJEHUN	240,852	39,501	2,199	2,833	193,147	3,172
Barri	25,929	4,743	194	249	20,575	168
Gallinas Peri	37,831	6,615	206	256	30,427	327
Kpaka	11,174	2,022	60	84	8,871	137
Kpanga-Kabonde	34,351	5,458	515	491	27,484	403

Table A15.3 Distribution of the population aged 10 years and over by chiefdom and status of tobacco and alcohol intake facility in the past one week (continued)

Region/ District/ Chiefdom	Tobacco and/or alcohol intake					
	Total	Tobacco only	Alcohol only	Both Tobacco and Alcohol	None	Don't Know
Makpele	21,038	3,135	136	157	17,304	306
Malen	36,425	5,543	410	717	28,978	777
Mano Sakrim	8,613	2,021	54	104	6,237	197
Panga Krim	5,980	869	73	105	4,908	25
Pejeh	9,231	1,021	32	82	8,055	41
Soro Gbema	28,658	3,769	269	222	23,962	436
Sowa	12,319	2,207	116	183	9,731	82
YKK	9,303	2,098	134	183	6,615	273
WESTERN	1,150,885	51,935	45,307	34,402	1,001,526	17,715
WESTERN AREA RURAL	328,748	20,289	11,136	10,206	282,067	5,050
Koya	50,383	3,563	1,742	1,547	43,096	435
Mountain	23,208	1,119	1,394	1,064	19,403	228
Waterloo	157,986	8,622	4,266	4,261	137,916	2,921
York Rural	97,171	6,985	3,734	3,334	81,652	1,466
WESTERN AREA URBAN	822,137	31,646	34,171	24,196	719,459	12,665
Central 1	49,335	1,630	2,209	1,698	43,237	561
Central 2	15,895	904	1,443	923	12,410	215
East 1	48,117	2,089	1,122	1,277	42,940	689
East 2	69,857	3,177	1,469	1,548	62,277	1,386
East 3	344,664	13,939	8,613	7,697	309,169	5,246
West 1	42,711	1,436	3,296	1,558	36,018	403
West 2	102,538	2,999	7,183	3,962	86,963	1,431
West 3	149,020	5,472	8,836	5,533	126,445	2,734

CHAPTER 16: EBOLA SOCIO-ECONOMIC IMPACTS

16.1 Introduction

The first Ebola outbreak in West Africa was reported in December 2013 in Guéckédou, a forest area of Guinea near the border with Liberia and Sierra Leone. By March 2014, Liberia had reported eight suspected cases and the first case was officially confirmed on 25 May 2014. The outbreak lasted for 18 months until 7 November 2015 when Sierra Leone was declared Ebola free.

Ebola is a viral haemorrhagic fever which affects humans and other primates. Signs and symptoms typically start between two days and three weeks after contracting the virus with a fever, sore throat, muscular pain and headaches. Then, vomiting, diaorrhea and rash usually follow, along with decreased function of the liver and kidneys. At this time, some people begin to bleed both internally and externally.

The disease has a high risk of death, killing between 25 and 90 per cent of those infected, with an average of about 50 per cent. This is often due to low blood pressure from fluid loss, and typically happens six to 16 days after symptoms appear. The virus spreads by direct contact with body fluids, such as blood, of infected human or other animals.

According to Wikipedia [3], the disease was first identified in 1976 in two simultaneous outbreaks, one in Nzara, and the other in Yambuku, a village near the Ebola River from which the disease takes its name. Outbreaks occur intermittently in tropical regions of sub-Saharan Africa. Between 1976 and 2013, the World Health Organization reported a total of 24 outbreaks involving 1,716 cases. The largest outbreak to date was the epidemic in West Africa, which occurred from December 2013 to January 2016 with 28,616 cases and 11,310 deaths.

16.2 Data sources

The 2015 Census questionnaire collected information from every household member who had been confirmed positive of contracting Ebola and their sex, age and status. Information was also collected on children below 18 years who had been orphaned. In addition, information on a person's main occupation before the Ebola outbreak, main current occupation, the Ebola impact on the person's revenue, health seeking behaviour and pregnancy status of women aged 10 to 54 years was collected.

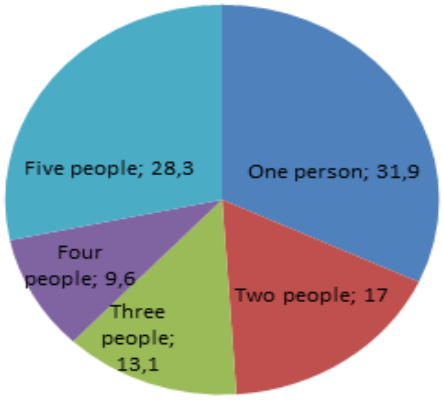
16.3 Incidence of Ebola

16.3.1 Demographic characteristics of persons infected with Ebola

The 2015 Census showed that a total of 13,575 people contracted Ebola. The disease affected males and females almost equally (6,827 or 50.3 per cent males to 6,748 or 49.7 per cent females). Respondents were asked to indicate the number of persons infected by Ebola in their households. For most of the households (31.9 per cent) only one person had been infected, followed by those who reported to have had five people infected (28.3 per cent), as seen in Figure 16.1. Given that Ebola is a highly contagious disease, it is likely to spread faster in household with many members.

3 https://en.wikipedia.org/wiki/Ebola_virus_disease

Figure 16.1 Percentage of people infected with Ebola by household size



Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 16.1 presents the distribution of the population affected by Ebola by selected characteristics and number of household members infected. For households that reported that one person was infected, more males than females were recorded. However, where there were two or more persons infected, more females were recorded. This could be attributed to the fact that more women than men cared for the sick household members and were therefore at higher risk of being infected. The analysis by age of the infected persons revealed that irrespective of the numbers infected in the households, the majority of the victims were young (aged 15 to 35 years), followed by persons aged 36 to 60 years.

Table 16.1 Distribution of the population infected with Ebola by sex and age group

Sex and age	Total	Number of household members confirmed Ebola positive				
		1	2	3	4	5+
Number	13,575	4,332	2,314	1,785	1,308	3,836
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Sex						
Male	50.3	54.2	48.7	49.4	46.7	48.5
Female	49.7	45.8	51.3	50.6	53.3	51.5
Age group						
0 - 14	21.4	14.5	19.2	22.2	26.3	28.7
15 - 35	42.4	42.9	44.4	42.2	40.9	41.2
36 - 60	27.5	33.4	28.7	26.6	23.9	21.6
60+	8.7	9.3	7.7	9.0	8.9	8.5

Source: Statistics Sierra Leone, 2015 Population and Housing Census

16.3.2 Socio-economic characteristics of persons infected with Ebola

A distribution of the number of household members infected with Ebola by place of residence and region shows that for most of the households, only one member got infected in every three out of five cases (Table 16.2). There were no major differences between rural and urban areas.

At the regional level, the proportion of households where only one member was infected by the virus varied from 58.2 per cent in the Northern Region to 69 per cent in the Southern Region.

The Northern Region reported the highest percentage (9.6 per cent) where five or more persons in a household were infected with Ebola. On the other hand, the Eastern Region presented the smallest proportion (4.6 per cent) where five or more members of the household were infected.

Table 16.2 Distribution of the number of household members infected with Ebola by place of residence and region

Place of residence/ region	Number	Percent	Number of household members confirmed Ebola positive				
			1	2	3	4	5+
Total	6,951	100.0	62.3	16.6	8.6	4.7	7.8
Rural	3,769	100.0	63.0	16.1	8.4	4.8	7.7
Urban	3,182	100.0	61.6	17.3	8.8	4.6	7.8
Region							
Eastern	1,768	100.0	67.9	15.8	8.7	3.0	4.6
Northern	3,110	100.0	58.2	17.5	9.1	5.7	9.6
Southern	620	100.0	69.0	12.7	7.3	4.7	6.3
Western	1,453	100.0	61.5	17.5	7.8	4.7	8.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

16.3.3 Status of infected persons by age, sex, place of residence and region

Overall, 81.1 per cent of those infected with Ebola did not survive (Table 16.3). Among the males who contracted the virus, 82.1 per cent died compared to 80.2 per cent for females. The results showed that slightly more males (50.9 per cent) died of Ebola than females.

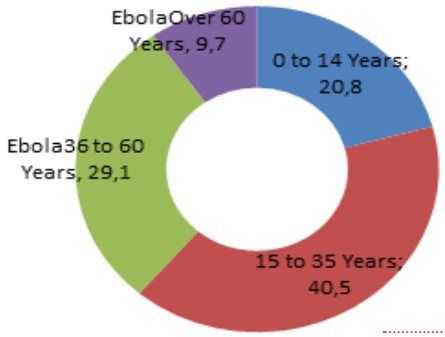
Table 16.3 Distribution of the population infected with Ebola by selected characteristics

Selected characteristics	Total	Status of household members confirmed with Ebola virus		
		Dead	Survived	Not Stated
Number	13,575	11,015	2,330	230
Percent	100.0	81.1	17.2	1.7
Male	100.0	82.1	16.2	1.7
Female	100.0	80.2	18.2	1.7
Broad age group				
0 - 14	100.0	78.7	18.9	2.4
15 - 35	100.0	77.4	21.0	1.5
36 - 60	100.0	85.9	13.0	1.2
60+	100.0	90.4	7.3	2.3
Place of residence				
Rural	100.0	84.4	14.1	1.5
Urban	100.0	77.4	20.6	1.9
Region				
Eastern	100.0	83.0	15.8	1.3
Northern	100.0	82.1	16.4	1.5
Southern	100.0	79.0	18.8	2.2
Western	100.0	77.9	19.8	2.3

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Analysis by age group showed that the youth (those between 15 to 35 years of age) registered the highest proportion of deaths (40.5 per cent) followed by persons between 36 to 60 years (29.1 per cent) as shown in Figure 16.2. However, the survival chances were lower for persons aged over 60 years as 90.4 per cent of those that were affected by the virus, died (Table 16.3).

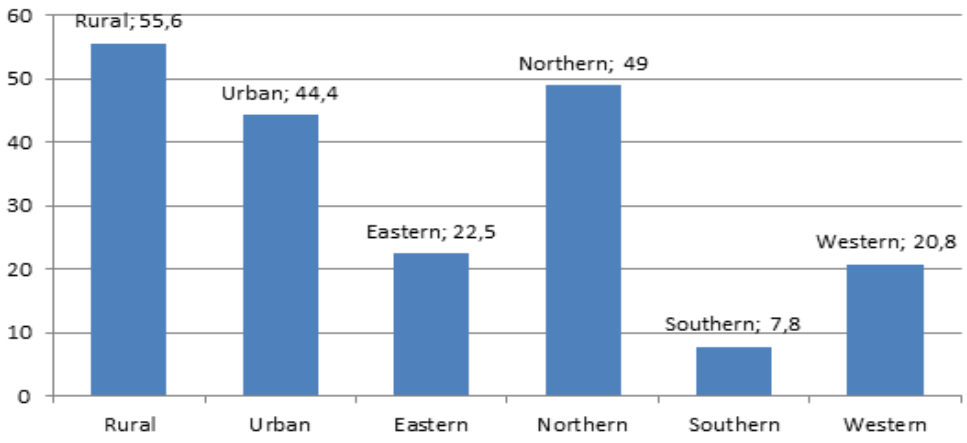
Figure 16.2 Distribution of persons who died from Ebola by age group category (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

Distribution of the deaths from Ebola by place of residence showed that the rural areas registered more deaths (55.6 per cent) than the urban areas (44.4 per cent), with the Northern Region leading in deaths due to the virus by 49 per cent (Figures 16.3). It is however worth noting that for people that were infected, those from the Southern Region registered the lowest percentage (7.8 per cent).

Figure 16.3 Deaths from Ebola by locality (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 16.4 shows the distribution of the population infected with Ebola by district and status of patient. From the table, it is evident that the disease spread to all districts despite a number of control measures, including community engagement, being put in place. At the district level the number of Ebola patients ranged from 17 in Bonthe to 3,594 in Port Loko. The proportion of Ebola patients who died was highest in Kenema district (87.4 per cent) and lowest in Koinadugu (70.5 per cent). Koinadugu district registered the highest survival rate from Ebola (25 per cent) while Bonthe (5.9 per cent) indicated the lowest. The detailed information at chiefdom level is presented in Appendix Table A16.1.

Table 16.4 Distribution of the population infected with Ebola by district and status

District	Status of Ebola patient				
	Number	Per cent	Dead	Survived	Not stated
Total	13,575	100.0	81.1	17.2	1.7
Kailahun	1,727	100.0	80.5	18.2	1.2
Kenema	802	100.0	87.4	11.5	1.1
Kono	454	100.0	84.4	13.9	1.8
Bombali	1,461	100.0	75.1	23.1	1.8
Kambia	416	100.0	80.5	17.5	1.9
Koinadugu	132	100.0	70.5	25.0	4.5
Port Loko	3,594	100.0	84.7	14.3	1.0
Tonkolili	963	100.0	85.4	12.0	2.6
Bo	477	100.0	79.9	17.8	2.3
Bonthe	17	100.0	76.5	5.9	17.6
Moyamba	388	100.0	76.0	22.2	1.8
Pujehun	208	100.0	82.7	15.9	1.4
Western Area Rural	1,502	100.0	78.4	20.1	1.5
Western Area Urban	1,434	100.0	77.4	19.5	3.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

16.4 Orphans

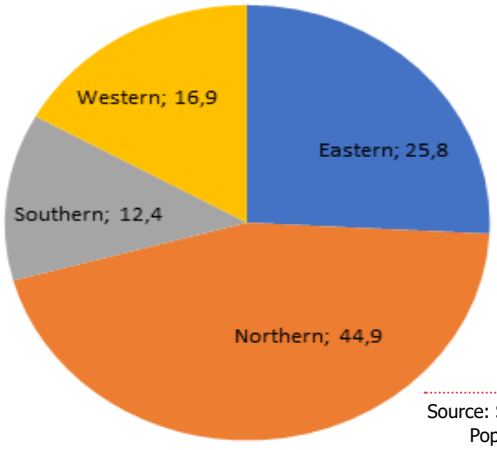
Overall, a total of 2,247 children were orphaned by Ebola. The majority (57.4 per cent) of the orphaned children lived in rural areas (Table 16.5). Many households were left with three or more orphans. At the regional level, the Northern Region was more affected with close to 45 per cent of the total orphans (Figure 16.4). The Southern Region had the lowest percentage share of the Ebola orphans.

Table 16.5 Distribution of children orphaned by Ebola by place of residence and region

Place of residence/region	Number	Percent	Number of household members confirmed Ebola positive		
			1	2	3+
Total	2,247	100.0	35.2	21.5	43.3
Rural	1,290	100.0	35.3	20.7	44.0
Urban	957	100.0	35.1	22.6	42.3
Region	580	100.0	31.7	20.9	47.4
Eastern	1,009	100.0	36.0	22.0	42.0
Northern	279	100.0	40.1	19.0	40.9
Southern	379	100.0	35.1	23.0	42.0
Western	1,453	100.0	61.5	17.5	7.8

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Figure 16.4 Distribution of Ebola orphans (per cent)



Source: Statistics Sierra Leone, 2015 Population and Housing Census

16.5 Socio-Economic Impacts

16.5.1 Main occupation before and after Ebola

The proportion of the economically active persons who maintained the same occupation before and after the Ebola outbreak varied from 69.1 per cent for technicians and associate professionals to 98.6 per cent for agricultural and fisheries workers (Table 16.6). Agriculture and fisheries workers registered the least change of occupation compared to others. Further examination of the results show that those who were employed as technicians and associate professionals before Ebola but reported another field after Ebola had mainly become agriculture and fisheries workers, service workers or had moved into craft and its related trade.

Table 16.6 Distribution of the economically active persons by main occupation before and after the Ebola outbreak

Main occupation before Ebola outbreak	Main occupation after Ebola					
	Number	Percentage	Not working	Legislators Senior Officials & Managers	Professionals	Technicians & Associate Professionals
Total	2,194,740	100.0	0.2	1.4	5.3	2.3
Not working	3,699	100.0	91.5	0.1	0.6	0.4
Legislators senior officials & managers	28,427	100.0	0.0	74.9	7.9	2.7
Professionals	140,724	100.0	0.1	0.3	79.0	4.4
Technicians & associate professionals	58,291	100.0	0.0	0.8	1.1	69.1
Clerks	16,235	100.0	0.1	0.5	0.9	1.0
Service workers/ shop and market sales workers	358,738	100.0	0.1	0.1	0.2	0.2
Agricultural and fishery worker	1,291,311	100.0	0.0	0.5	0.1	0.1
Craft and related trade workers	156,918	100.0	0.1	0.1	0.3	0.2
Plant & machine operators & assemblers	57,889	100.0	0.2	0.4	0.1	0.2
Elementary occupations	59,908	100.0	0.1	0.1	0.2	0.2
Others	13,911	100.0	0.6	0.2	0.3	0.5
Not stated	8,689	100.0	0.0	0.4	2.0	0.7

Table 16.6 Distribution of the economically active persons by main occupation before and after the Ebola outbreak (continued)

Main occupation before Ebola outbreak	Main occupation after Ebola							
	Clerks	Service Workers	Agricultural and Fishery Worker	Craft and Related Trade Workers	Plant & Machine Operators & Assemblers	Elementary Occupations	Others	Not stated
Total	0.8	16.5	59.2	7.2	2.7	2.8	0.9	0.7
Not working	0.2	2.7	1.6	1.0	0.4	0.9	0.0	0.5
Legislators senior officials & managers	1.7	3.0	1.5	3.6	1.5	0.9	1.3	1.0
Professionals	0.2	3.5	8.7	1.5	0.4	0.8	0.2	0.9
Technicians & associate professionals	0.3	7.5	12.8	3.8	1.2	2.2	0.4	0.9
Clerks	85.4	2.4	6.5	0.9	0.4	0.5	0.3	1.1
Service workers/ shop and market sales workers	0.1	96.7	0.6	0.3	0.1	0.1	1.0	0.5
Agricultural and fishery worker	0.1	0.2	98.6	0.1	0.0	0.0	0.0	0.3
Craft and related trade workers	0.1	1.2	1.0	95.3	0.3	0.5	0.3	0.5
Plant & machine operators & assemblers	0.1	0.7	0.6	0.5	95.8	0.3	0.4	0.8
Elementary occupations	0.1	0.5	1.1	0.4	0.2	95.4	0.9	0.8
Others	0.1	1.1	0.6	0.8	0.5	0.3	93.6	1.5
Not stated	0.4	5.9	10.8	2.3	1.2	1.6	0.2	74.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

Table 16.7 Distribution of population in working ages by impact of Ebola on personal income by place of residence and region

Place of residence/ region	Number	Percent	Ebola impact on the person's revenue					
			Increased substantially	Increased	No change	Decreased	Decreased substantially	Not stated
Number	2,194,738		36,537	156,277	451,455	1,217,811	298,446	34,212
Total		100.0	1.7	7.1	20.6	55.5	13.6	1.6
Rural	1,430,784	100.0	1.4	5.8	17.2	58.8	15.2	1.5
Urban	763,954	100.0	2.2	9.6	26.8	49.2	10.5	1.7
Eastern	523,376	100.0	1.4	6.0	17.9	58.8	14.3	1.6
Northern	815,864	100.0	1.6	7.2	17.0	60.4	12.0	1.7
Southern	434,830	100.0	1.5	5.5	21.3	51.7	18.6	1.4
Western	420,668	100.0	2.3	10.0	30.0	45.7	10.6	1.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The majority of the population of working age in all districts indicated that their income had decreased (Table 16.8). The proportion of the population in the working ages that indicated that their income decreased varied from, 42.7 per cent for Western Area Urban to 74.9 per cent in Koinadugu district. Western Area Urban showed the highest proportion (33.6 per cent) of the working population that indicated that their income increased, while Koinadugu district showed the lowest (8.1 per cent). In all districts there were people who reported that their incomes decreased substantially. The proportion varied from 9.2 per cent in Kambia district to 22.3 per cent in Pujehun district. The detailed information at chiefdom level is presented in Appendix Table A16.2.

Table 16.8 Distribution of population in working ages by impact of Ebola on a person's income by district

			Ebola impact on the person's revenue					
District	Number	Percent	Increased substantially	Increased	No change	Decreased	Decreased substantially	Not stated
Total	2,194,740	100.0	1.7	7.1	20.6	55.5	13.6	1.6
Kailahun	176,383	100.0	1.0	4.7	11.9	67.1	14.6	0.8
Kenema	190,930	100.0	2.2	8.9	26.5	50.6	10.1	1.7
Kono	156,063	100.0	0.8	4.0	14.2	59.7	19.1	2.3
Bombali	189,123	100.0	1.7	8.0	21.6	54.5	12.2	2.1
Kambia	125,444	100.0	1.9	8.6	15.5	63.5	9.2	1.4
Koinadugu	147,052	100.0	0.3	2.9	8.1	74.9	12.4	1.3

Table 16.8 Distribution of population in working ages by impact of Ebola on a person's income by district (continued)

			Ebola impact on the person's revenue					
District	Number	Percent	Increased substantially	Increased	No change	Decreased	Decreased substantially	Not stated
Port Loko	196,169	100.0	2.4	9.5	18.5	54.9	12.8	2.0
Tonkolili	158,076	100.0	1.7	6.4	19.2	58.4	12.8	1.4
Bo	162,429	100.0	1.2	5.8	20.1	54.4	16.9	1.5
Bonthe	65,944	100.0	0.7	3.8	21.6	51.4	21.1	1.3
Moyamba	112,944	100.0	2.0	6.2	26.0	47.5	16.5	1.8
Pujehun	93,513	100.0	1.8	5.2	17.6	52.2	22.3	0.9
Western Area Rural	132,433	100.0	2.0	8.9	22.1	52.3	13.4	1.4
Western Area Urban	288,237	100.0	2.4	10.6	33.6	42.7	9.4	1.4

Source: Statistics Sierra Leone, 2015 Population and Housing Census

16.6 Sick household members who did not seek medical attention

According to the World Health Organization, Ebola is a virus that causes an acute, serious illness which is often fatal if untreated. Control of outbreaks calls for collaboration among the various stakeholders including government, medical workers, community leaders and the entire population. The medical services include rapid detection of cases of disease, contact tracing of those who have come into contact with infected individuals, quick access to laboratory services, proper healthcare for those who are infected, and proper disposal of the dead through cremation or burial. No specific treatment or vaccine for the virus is available, although a number of potential treatments are being studied.

16.6.1 Sick household members who did not seek medical attention by age and sex

The distribution of the persons who were sick during the Ebola period but did not seek medical attention is given in Table 16.9. Overall, a total of 12,865 people (constituting 0.2 per cent of the total population) fell sick during the Ebola outbreak but did not seek for medical attention. Women and girls made up more than half of that number (53.3 per cent). Women aged 20 to 29 formed the largest proportion of those who fell sick with but not seek for medical attention (20.8 per cent).

Close to 20 per cent of the patients who didn't seek treatment were under nine years of age. Those aged 65-69 years formed the lowest proportion. Among the males, the largest proportion (21.8 per cent) were aged under nine years.

Table 16.9. Distribution of persons who got sick during the Ebola outbreak but did not seek medical attention by age and sex

Age group	Total	Male	Female
Number	12,865	6,002	6,863
Percent	100.0	100.0	100.0
0 - 4	9.8	10.4	9.2
5 - 9	9.8	11.4	8.4
10 - 14	7.5	7.8	7.2
15 - 19	8.7	7.9	9.5
20 - 24	9.3	8.3	10.2
25 - 29	9.7	8.7	10.6
30 - 34	7.5	6.6	8.3
35 - 39	7.8	7.6	7.9
40 - 44	6.0	6.4	5.7
45 - 49	5.1	5.7	4.5
50 - 54	4.2	4.0	4.3
55 - 59	2.7	2.7	2.7
60 - 64	3.0	3.1	2.8
65 - 69	1.9	2.0	1.8
70 - 74	2.0	2.1	1.8
75+	5.1	5.1	5.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

16.6.2 Sick household members during the Ebola outbreak but did not seek medical attention by place of residence and region

Table 16.10 presents the distribution of the persons who got sick during the Ebola outbreak but did not seek medical attention by place of residence, region and sex. The evidence from the table shows that over one-third of the persons who were sick during the outbreak but did not seek medical attention were in the Northern Region. A trend similar to that overall is revealed when the analysis is done by sex. Analysis by place of residence confirmed the Northern Region (44.8 per cent) and the Western Region (46.9 per cent) as having the highest proportion for rural and urban, respectively.

Table 16.10 Distribution of persons who were sick but did not seek for medical attention by place of residence and sex

Region	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Number	12,865	6,002	6,863	7,227	3,545	3,682	5,638	2,457	3,181
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Eastern	20.3	19.7	20.8	19.1	18.4	19.8	21.8	21.6	21.9
Northern	34.6	35.1	34.1	44.8	44.2	45.3	21.5	21.9	21.2
Southern	24.2	26.1	22.4	35.3	36.4	34.2	9.8	11.3	8.7
Western	21.0	19.1	22.7	0.8	1.0	0.6	46.9	45.2	48.2

Source: Statistics Sierra Leone, 2015 Population and Housing Census

16.6.3 Sick persons who did not seek medical attention by sex and region

From table 16.11, it can be seen that overall more people in the rural areas (57.1 per cent) did not seek medical care as compared to their counterparts in urban areas. There were more females (54.6 per cent) than males (45.4 per cent) who fell sick during the Ebola outbreak but did not seek medical care.

The only place where more males failed to seek medical attention than females was the Western Area Rural. The proportion of females who did not seek medical attention varied from 41.3 per cent in Western Area Rural to 58.1 per cent in Western Area Urban.

Table 16.11 Distribution of the population who got sick during the Ebola outbreak but did not seek medical attention by sex, region and place of residence

	Region by place of residence								
Sex	All Regions			Eastern			Northern		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Number	15,120	8,635	6,485	2,922	1,535	1,387	5,400	3,930	1,470
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male	45.4	47.3	42.8	44.3	45.9	42.5	46.0	47.0	43.1
Female	54.6	52.7	57.2	55.7	54.1	57.5	54.0	53.0	56.9

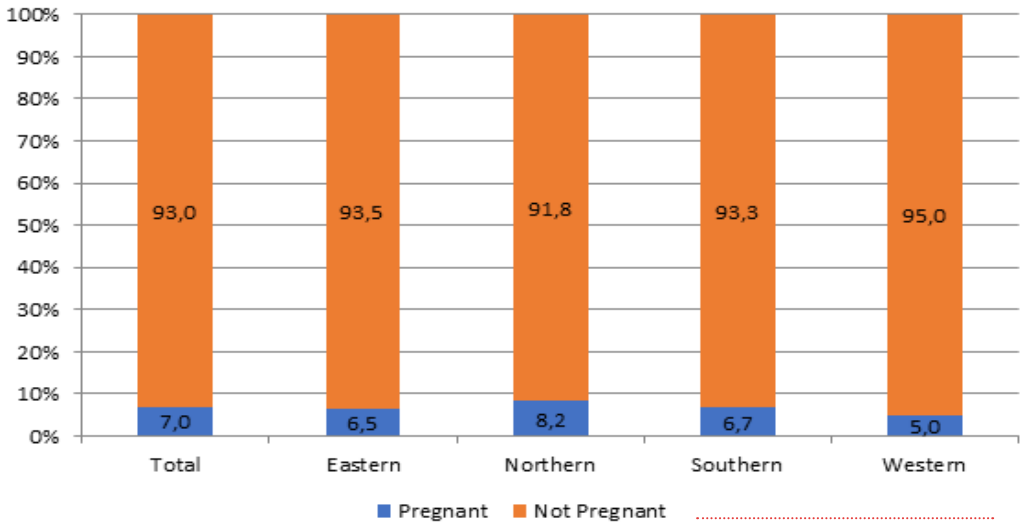
Table 16.11 Distribution of the population who got sick during the Ebola outbreak but did not seek medical attention by sex, region and place of residence (continued)

	Region by place of residence					
Sex	Southern			Western		
	Total	Rural	Urban	Total	Rural	Urban
Number	3,756	3,107	649	3,042	63	2,979
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Male	48.0	48.2	47.1	42.2	58.7	41.9
Female	52.0	51.8	52.9	57.8	41.3	58.1

Source: Statistics Sierra Leone, 2015 Population and Housing Census

The respondents were asked to state whether the women aged 10 to 54 years who were sick during the Ebola but did not seek medical attention were pregnant. Overall, a total of 1,165 women were aged 10 to 54 years and 81 of them were pregnant at the time of the outbreak. Within each region, the proportion of the total female population not seeking medical attention who were pregnant at the time of the outbreak varied from 5 per cent in the Western Region to 8.2 per cent in the Northern Region (Figure 16.6).

Figure 16.6 Female population aged 10-54 years sick during the Ebola but did not seek medical attention by pregnancy status and region



Source: Statistics Sierra Leone, 2015 Population and Housing Census

16.7 Summary, conclusions and recommendations

16.7.1 Summary

The 2015 Census included questions to assess the socio-economic impacts of Ebola. The findings revealed that a total of 13,575 people were infected with Ebola in all districts of Sierra Leone. More males (50.3 per cent) than females were infected. The majority of the victims were aged between 15 and 35 years, followed by persons aged 36 to 60 years. The youth (15-35 years) also registered the highest death rate (40.5 per cent) from Ebola. However the survival rates were lowest for those aged over 60 years - 90.4 per cent who were infected in this age group died. The rural areas registered more deaths (55.6 per cent) than the urban areas.

Furthermore, a number of socio-economic and demographic impacts were noted. A total of 2,247 children were orphaned by Ebola. Fifty five per cent of the population of working age reported that their income decreased due to the outbreak. More people in the rural areas (57.1 per cent) who got sick during the Ebola but did not seek medical care compared to those in urban areas (42.9 per cent). A total of 1,165 women in the age range 10 to 54 years were sick during the Ebola and 81 of them were pregnant at the time of the Ebola outbreak.

The proportion of economically active persons who maintained the same occupation varied from 69.1 per cent for technicians and associate professionals to 98.6 per cent for agricultural and fisheries workers. The findings show that agriculture and fisheries workers were the the least likely to have changed occupation as a result of the outbreak. Further examination of the results shows that technicians and associate professionals who changed occupation after the outbreak mainly became agriculture and fisheries workers, service workers or moved into craft and other related occupations.

16.7.2 Conclusion

In Sierra Leone, 81.1 per cent of those who were infected with Ebola died. The disease negatively impacted on the income of the working population. There is also evidence that many people changed jobs because of the outbreak.

16.7.3 Recommendations

Given that Ebola is known to kill on average half of those who contract it, the Government should sensitize the entire population about the virus and how it is spread.

The disease spread quickly across every district in the country. To prevent this in future, the Government should put in place mechanisms to enable local leaders to report, and get timely responses, whenever a strange disease affects community members.

Community engagement is key to successfully controlling Ebola outbreaks. The ministry responsible for health needs to collaborate with community leaders to ensure that good disease outbreak controls are in place.

The key aspects of disease outbreak controls include: case management, infection prevention and control practices, surveillance and contact tracing, a good laboratory service, safe burials and social mobilization. Community leaders should also enforce safe sanitation as a way of avoiding spread of diseases.

Ebola negatively impacted on the socio-economic and demographic status of households. Household incomes were reduced, some household members lost their jobs and children were orphaned. The Government should put in place mechanisms to support affected households. For instance, the Ebola orphans should be supported to access the basic necessities of life and education.

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APPENDIX

Table A16.1 Distribution of the population affected by district and Ebola by status of patient

Region/ District/ Chiefdom	Status of Ebola Patient			
	Total	Dead	Survived	Not Stated
SierraLeone	13,575	11,015	2,330	230
EASTERN	2,983	2,475	470	38
KAILAHUN	1,727	1,391	315	21
Dea	12	9	3	-
Jawie	487	418	67	2
Kissi Kama	8	1	7	-
Kissi Teng	291	223	59	9
Kissi Tongi	99	65	32	2
Kpeje Bongre	121	102	17	2
Kpeje West	27	19	8	-
Luawa	327	272	51	4
Malema	12	9	2	1
Mandu	28	12	16	-
Njaluahun	120	97	23	-
Penguia	2	2	-	-
Upper Bambara	116	91	25	-
Yawei	77	71	5	1

Table A16.1 Distribution of the population affected by district and Ebola by status of patient (continued)

Region/District/ Chiefdom	Status of Ebola Patient			
	Total	Dead	Survived	Not Stated
KENEMA	802	701	92	9
Dama	3	3	-	-
Dodo	2	2	-	-
Gaura	28	27	1	-
Gorama Mende	40	36	4	-
Kandu Lekpeama	17	16	1	-
Koya	6	6	-	-
Langrama	-	-	-	-
Lower Bambara	45	40	5	-
Malegohun	1	1	-	-
Niawa	3	3	-	-
Nomo	2	2	-	-
Nongowa	160	153	5	2
Simbaru	-	-	-	-
Small Bo	6	6	-	-
Tunkia	12	12	-	-
Wandor	52	45	7	-
Kenema City	425	349	69	7

Table A16.1 Distribution of the population affected by district and Ebola by status of patient (continued)

Region/District/ Chiefdom	Status of Ebola Patient			
	Total	Dead	Survived	Not Stated
KONO	454	383	63	8
Fiama	-	-	-	-
Gbane	6	4	1	1
Gbane Kandor	-	-	-	-
Gbense	14	13	1	-
Gorama Kono	2	2	-	-
Kamara	63	58	5	-
Lei	1	1	-	-
Mafindor	2	2	-	-
Nimikoro	124	109	13	2
Nimiyama	38	31	7	-
Sandor	15	12	2	1
Soa	17	17	-	-
Tankoro	-	-	-	-
Toli	-	-	-	-
Koidu/New	172	134	34	4
NORTHERN	6,566	5,392	1,074	100
BOMBALI	1,461	1,097	338	26
Biriwa	16	9	3	4
Bombali Sebora	188	148	40	-

Table A16.1 Distribution of the population affected by district and Ebola by status of patient (continued)

Region/District/ Chiefdom	Status of Ebola Patient			
	Total	Dead	Survived	Not Stated
Gbanti-Kamaranka	35	28	6	1
Gbendembu Ngowahun	20	15	5	-
Libeisaygahun	-	-	-	-
Magbaimba Ndorhahun	2	1	-	1
Makari Gbanti	501	392	97	12
Paki Masabong	121	97	16	8
Safroko Limba	85	54	31	-
Sanda Loko	16	11	5	-
Sanda Tendaren	-	-	-	-
Sella Limba	5	5	-	-
Tambakka	1	1	-	-
Makeni City	471	336	135	-
KAMBIA	416	335	73	8
Bramaia	10	9	1	-
Gbinle-Dixing	57	42	11	4
Magbema	251	206	44	1
Mambolo	17	12	4	1
Masungbala	14	13	-	1
Samu	30	20	10	-
Tonko Limba	37	33	3	1

Table A16.1 Distribution of the population affected by district and Ebola by status of patient (continued)

Region/District/ Chiefdom	Status of Ebola Patient			
	Total	Dead	Survived	Not Stated
KOINADUGU	132	93	33	6
Dembelia Sinkunia	-	-	-	-
Diang	-	-	-	-
Follosaba Dembelia	-	-	-	-
Kasunko	1	1	-	-
Mongo	-	-	-	-
Neya	-	-	-	-
Nieni	120	83	32	5
Sengbe	4	3	1	-
Sulima	-	-	-	-
Wara Wara Bafodia	1	-	-	1
Wara Wara Yagala	6	6	-	-
PORT LOKO	3,594	3,045	514	35
BKM	179	170	7	2
Buya Romende	530	444	85	1
Dibia	51	48	1	2
Kaffu Bullom	317	249	67	1
Koya	843	700	141	2
Lokomasama	316	269	46	1
Maforki	359	301	53	5

Table A16.1 Distribution of the population affected by district and Ebola by status of patient (continued)

Region/District/ Chiefdom	Status of Ebola Patient			
	Total	Dead	Survived	Not Stated
Marampa	710	601	94	15
Masimera	191	181	10	-
Sanda Magbolontor	29	27	2	-
TMS	69	55	8	6
TONKOLILI	963	822	116	25
Gbonkolenken	124	105	19	-
Kafe Simira	7	4	1	2
Kalansogoia	-	-	-	-
Kholifa Mabang	21	20	1	-
Kolifa Rowalla	277	239	28	10
Kunike Barina	13	13	-	-
Kunike Sanda	166	144	15	7
Malal Mara	81	66	10	5
Sambaya	-	-	-	-
Tane	73	70	3	-
Yoni	201	161	39	1
SOUTHERN	1,090	861	205	24
BO	477	381	85	11
Badjia	3	3	-	-
Bagbo	2	-	2	-

Table A16.1 Distribution of the population affected by district and Ebola by status of patient (continued)

Region/District/ Chiefdom	Status of Ebola Patient			
	Total	Dead	Survived	Not Stated
Bagbwe	1	-	-	1
Baoma	45	43	2	-
Bumpe Ngawo	36	23	13	-
Gbo	6	6	-	-
Jaiama-Bongor	12	10	1	1
Kakua	88	70	16	2
Komboya	-	-	-	-
Lugbu	-	-	-	-
Niawa Lenga	50	42	8	-
Selenga	-	-	-	-
Tikonko	56	46	8	2
Valunia	24	16	7	1
Wunde	1	-	1	-
Bo City	153	122	27	4
BONTHE	17	13	1	3
Bendu Cha	-	-	-	-
Bum	1	1	-	-
Dema	1	1	-	-
Imperi	4	4	-	-
Jong	6	5	1	-

Table A16.1 Distribution of the population affected by district and Ebola by status of patient (continued)

Region/District/ Chiefdom	Status of Ebola Patient			
	Total	Dead	Survived	Not Stated
Kpanga Kemo	1	1	-	-
Kwamebai Krim	-	-	-	-
Nongoba Bullom	2	-	-	2
Sittia	-	-	-	-
Sogbini	1	1	-	-
Yawbeko	-	-	-	-
Bonthe Municipal	1	-	-	1
MOYAMBA	388	295	86	7
Bagruwa	3	2	1	-
Bumpeh	40	35	4	1
Dasse	-	-	-	-
Fakunya	60	36	24	-
Kagboro	13	10	2	1
Kaiyamba	66	50	13	3
Kamajei	2	1	-	1
Kongbora	1	1	-	-
Kori	69	59	9	1
Kowa	-	-	-	-
Lower Banta	22	9	13	-
Ribbi	106	87	19	-

Table A16.1 Distribution of the population affected by district and Ebola by status of patient (continued)

Region/District/ Chiefdom	Status of Ebola Patient			
	Total	Dead	Survived	Not Stated
Timdale	6	5	1	-
Upper Banta	-	-	-	-
PUJEHUN	208	172	33	3
Barri	11	8	3	-
Gallinas Peri	29	16	13	-
Kpaka	1	-	1	-
Kpanga-Kabonde	25	22	2	1
Makpele	122	111	11	-
Malen	5	4	-	1
Mano Sakrim	3	2	1	-
Panga Krim	7	5	2	-
Pejeh	1	-	-	1
Soro Gbema	2	2	-	-
Sowa	-	-	-	-
YKK	2	2	-	-
WESTERN	2,936	2,287	581	68
WESTERN AREA RURAL	1,502	1,177	302	23
Koya	400	341	47	12
Mountain	82	22	60	-
Waterloo	559	428	123	8

Table A16.1 Distribution of the population affected by district and Ebola by status of patient (continued)

Region/District/ Chiefdom	Status of Ebola Patient			
	Total	Dead	Survived	Not Stated
York Rural	461	386	72	3
WESTERN AREA URBAN	1,434	1,110	279	45
Central 1	55	45	10	-
Central 2	15	11	4	-
East 1	137	106	28	3
East 2	249	191	32	26
East 3	682	514	153	15
West 1	34	27	7	-
West 2	119	104	14	1
West 3	143	112	31	-

Table A16.2 Distribution of the population infected by Ebola by socio-economic impact

Region/District/ Chiefdom	Status of Ebola Patient						
	Total	Increased substan-tially	Increased	No change	Decreased	Decreased substantially	Not stated
Sierra Leone	2,194,740	36,537	156,277	451,455	1,217,811	298,446	34,214
EASTERN	523,376	7,120	31,356	93,878	307,994	74,788	8,240
KAILAHUN	176,383	1,738	8,218	21,042	118,328	25,717	1,340
Dea	5,309	2	92	126	4,378	678	33
Jawie	18,260	117	1,134	1,751	12,831	2,287	140
Kissi Kama	7,192	275	433	946	4,917	583	38
Kissi Teng	13,720	79	789	1,844	8,852	2,087	69
Kissi Tongi	12,363	166	663	1,336	8,618	1,458	122
Kpeje Bongre	8,582	418	957	1,146	5,084	900	77
Kpeje West	9,228	79	290	553	6,653	1,617	36
Luawa	27,889	394	1,871	7,486	14,858	3,054	226
Malema	14,358	48	221	931	12,227	837	94
Mandu	10,225	14	204	673	6,173	3,114	47
Njaluahun	19,667	85	1,075	2,811	12,482	3,059	155
Penguia	8,524	8	208	561	6,483	1,139	125
Upper Bambara	10,362	49	242	531	6,111	3,309	120
Yawei	10,704	4	39	347	8,661	1,595	58

Table A16.2 Distribution of the population infected by Ebola by socio-economic impact (continued)

Region/District/ Chiefdom	Status of Ebola Patient						
	Total	Increased substan-tially	Increased	No change	Decreased	Decreased substantially	Not stated
KENEMA	190,930	4,172	16,915	50,631	96,566	19,320	3,326
Dama	7,019	40	565	2,664	3,090	617	43
Dodo	9,335	753	1,026	974	4,785	1,668	129
Gaura	5,641	85	443	1,739	2,509	676	189
Gorama Mende	17,248	194	676	4,372	9,962	1,949	95
Kandu Lekpeama	6,806	62	504	1,434	3,920	768	118
Koya	5,626	18	111	2,095	2,240	1,130	32
Langrama	1,332	6	121	314	373	518	-
Lower Bambara	28,426	487	1,919	6,382	17,027	2,297	314
Malegohun	8,462	33	510	1,335	5,565	641	378
Niawa	2,982	48	59	317	1,241	1,263	54
Nomo	2,371	1	92	692	1,104	246	236
Nongowa	19,224	381	2,132	4,381	10,611	1,498	221
Simbaru	7,100	19	526	2,166	3,740	487	162
Small Bo	9,908	65	663	2,124	5,124	1,537	395
Tunkia	11,792	134	1,173	3,201	6,306	653	325
Wandor	8,885	337	958	1,549	4,887	1,081	73
Kenema City	38,773	1,509	5,437	14,892	14,082	2,291	562

Table A16.2 Distribution of the population infected by Ebola by socio-economic impact (continued)

Region/District/ Chiefdom	Status of Ebola Patient						
	Total	Increased substan-tially	Increased	No change	Decreased	Decreased substantially	Not stated
KONO	156,063	1,210	6,223	22,205	93,100	29,751	3,574
Fiama	5,353	4	157	727	3,413	815	237
Gbane	9,515	5	61	858	7,000	1,540	51
Gbane Kandor	2,855	-	9	24	1,490	764	568
Gbense	3,398	15	57	403	2,333	550	40
Gorama Kono	5,863	7	38	119	3,501	2,106	92
Kamara	5,218	5	194	756	2,739	1,379	145
Lei	8,417	16	422	576	5,154	1,951	298
Mafindor	4,108	2	8	62	3,127	880	29
Nimikoro	19,098	343	1,540	3,475	8,473	4,796	471
Nimiyama	8,684	112	400	2,046	4,740	1,241	145
Sandor	35,080	195	1,489	6,138	20,074	6,866	318
Soa	12,649	39	438	575	9,264	2,162	171
Tankoro	3,327	19	49	396	2,462	325	76
Toli	2,227	3	13	56	1,926	72	157
Koidu/New	30,271	445	1,348	5,994	17,404	4,304	776

Table A16.2 Distribution of the population infected by Ebola by socio-economic impact (continued)

Region/District/ Chiefdom	Status of Ebola Patient						
	Total	Increased substan-tially	Increased	No change	Decreased	Decreased substantially	Not stated
NORTHERN	815,864	13,446	58,861	138,792	492,844	98,118	13,803
BOMBALI	189,123	3,244	15,118	40,774	103,030	23,069	3,888
Biriwa	12,837	417	1,112	3,162	6,630	1,054	462
Bombali Sebora	11,008	278	1,671	2,592	5,016	1,239	212
Gbanti-Kamaranka	9,348	26	474	3,270	4,466	891	221
Gbendembu Ngowahun	9,302	162	938	2,749	3,740	1,335	378
Libeisaygahun	6,857	40	286	814	5,256	419	42
Magbaimba Ndorhahun	4,144	184	116	197	2,769	825	53
Makari Gbanti	25,083	470	1,793	6,033	13,330	2,938	519
Paki Masabong	7,117	9	179	755	3,692	2,388	94
Safroko Limba	10,958	49	436	2,102	7,127	1,132	112
Sanda Loko	14,117	106	800	3,933	7,894	975	409
Sanda Tendaren	9,325	371	786	1,369	5,673	966	160
Sella Limba	20,003	459	2,674	4,496	9,804	1,987	583
Tambakka	16,715	24	633	1,732	9,949	4,270	107
Makeni City	32,309	649	3,220	7,570	17,684	2,650	536

Table A16.2 Distribution of the population infected by Ebola by socio-economic impact (continued)

Region/District/ Chiefdom	Status of Ebola Patient						
	Total	Increased substan-tially	Increased	No change	Decreased	Decreased substantially	Not stated
KAMBIA	125,444	2,345	10,786	19,469	79,624	11,492	1,728
Bramaia	13,360	258	925	2,417	7,329	2,196	235
Gbinle-Dixing	8,455	55	821	849	5,224	1,397	109
Magbema	29,826	594	3,776	5,205	17,560	2,284	407
Mambolo	14,951	133	327	483	12,322	1,261	425
Masung bala	13,300	242	838	1,831	9,858	417	114
Samu	24,715	637	3,041	4,472	14,155	2,253	157
Tonko Limba	20,837	426	1,058	4,212	13,176	1,684	281
KOINADUGU	147,052	469	4,289	11,956	110,174	18,184	1,980
Dembelia Sinkunia	8,260	3	29	62	7,101	1,030	35
Diang	10,770	43	813	957	7,311	1,475	171
Follosaba Dembelia	7,504	12	61	218	5,992	1,181	40
Kasunko	9,807	49	735	1,126	6,803	1,041	53
Mongo	20,014	9	323	1,099	16,173	2,146	264
Neya	17,514	36	113	326	15,181	1,698	160
Nieni	28,454	60	746	1,715	20,992	4,555	386
Sengbe	11,441	37	230	475	7,603	2,802	294
Sulima	14,342	27	298	2,511	11,068	290	148
Wara Wara Bafodia	9,342	6	112	2,155	5,810	996	263
Wara Wara Yagala	9,604	187	829	1,312	6,140	970	166

Table A16.2 Distribution of the population infected by Ebola by socio-economic impact (continued)

Region/District/ Chiefdom	Status of Ebola Patient						
	Total	Increased substan-tially	Increased	No change	Decreased	Decreased substantially	Not stated
PORT LOKO	196,169	4,631	18,613	36,273	107,668	25,062	3,922
BKM	14,430	187	1,319	1,439	9,909	1,325	251
Buya Romende	12,753	179	2,264	2,196	6,066	1,801	247
Dibia	6,068	7	221	1,253	3,218	1,224	145
Kaffu Bullom	27,221	700	2,370	6,025	14,199	3,324	603
Koya	27,149	574	2,350	5,713	14,735	2,731	1,046
Lokomasama	28,092	440	2,581	5,883	14,305	4,553	330
Maforki	29,568	1,714	4,123	6,167	13,980	3,217	367
Marampa	15,900	225	1,087	2,826	9,340	1,937	485
Masimera	16,114	235	1,390	2,427	9,848	2,034	180
Sanda Magbolontor	8,750	58	425	1,188	5,460	1,558	61
TMS	10,124	312	483	1,156	6,608	1,358	207
TONKOLILI	158,076	2,757	10,055	30,320	92,348	20,311	2,285
Gbonko lenken	20,573	931	2,359	2,986	10,271	3,647	379
Kafe Simira	12,977	36	355	2,713	8,427	1,213	233
Kalansogoia	9,527	118	370	2,412	5,003	1,501	123
Kholifa Mabang	4,366	85	509	481	2,157	1,051	83
Kolifa Rowalla	19,339	509	1,544	3,510	12,196	1,367	213
Kunike Barina	9,518	68	97	673	7,097	1,463	120
Kunike Sanda	26,696	321	1,660	5,045	16,261	3,101	308

Table A16.2 Distribution of the population infected by Ebola by socio-economic impact (continued)

Region/District/ Chiefdom	Status of Ebola Patient						
	Total	Increased substan-tially	Increased	No change	Decreased	Decreased substantially	Not stated
Malal Mara	6,717	51	580	1,034	4,316	702	34
Sambaya	7,227	205	616	3,052	2,593	599	162
Tane	12,102	101	653	3,381	6,760	976	231
Yoni	29,034	332	1,312	5,033	17,267	4,691	399
SOUTHERN	434,830	6,347	23,818	92,733	224,821	80,835	6,276
BO	162,429	1,995	9,501	32,656	88,425	27,395	2,457
Badjia	3,863	349	982	717	1,750	37	28
Bagbo	10,736	159	424	1,977	5,861	2,174	141
Bagbwe	6,297	36	315	1,318	3,937	624	67
Baoma	13,910	158	859	2,329	8,247	1,805	512
Bumpe Ngawo	16,292	61	480	3,168	9,832	2,445	306
Gbo	2,295	2	40	381	1,251	612	9
Jaiama-Bongor	11,525	24	377	2,213	6,329	2,461	121
Kakua	10,327	173	568	3,187	5,155	1,183	61
Komboya	5,881	87	738	1,476	3,428	103	49
Lugbu	7,378	5	25	719	4,132	2,406	91
Niawa Lenga	3,409	7	31	203	2,482	645	41
Selenga	1,503	6	121	309	789	267	11
Tikonko	13,239	151	997	2,871	5,804	3,265	151
Valunia	15,968	61	927	2,307	9,530	2,943	200

Table A16.2 Distribution of the population infected by Ebola by socio-economic impact (continued)

Region/District/ Chiefdom	Status of Ebola Patient						
	Total	Increased substan-tially	Increased	No change	Decreased	Decreased substantially	Not stated
Wunde	5,929	2	64	233	3,968	1,630	32
Bo City	33,877	714	2,553	9,248	15,930	4,795	637
BONTHE	65,944	459	2,493	14,273	33,913	13,935	871
Bendu Cha	2,528	15	194	129	1,737	383	70
Bum	9,713	2	79	1,067	4,891	3,608	66
Dema	3,232	28	155	557	1,577	891	24
Imperi	7,943	264	542	1,961	3,961	1,016	199
Jong	10,673	21	249	2,660	5,525	2,176	42
Kpanga Kemo	2,798	8	133	766	1,389	449	53
Kwamebai Krim	4,923	4	16	36	2,309	2,464	94
Nongoba Bullom	7,396	35	251	753	4,996	1,228	133
Sittia	7,791	41	335	2,509	4,186	662	58
Sogbini	3,286	21	271	1,719	831	355	89
Yawbeko	2,993	7	14	1,039	1,431	483	19
Bonthe Municipal	2,668	13	254	1,077	1,080	220	24
MOYAMBA	112,944	2,205	7,003	29,344	53,686	18,617	2,089
Bagruwa	7,915	144	279	1,301	3,436	2,537	218
Bumpeh	14,819	274	1,433	3,508	7,043	2,340	221
Dasse	5,938	119	624	1,173	3,169	804	49
Fakunya	9,580	27	488	1,111	6,192	1,552	210

Table A16.2 Distribution of the population infected by Ebola by socio-economic impact (continued)

Region/District/ Chiefdom	Status of Ebola Patient						
	Total	Increased substan-tially	Increased	No change	Decreased	Decreased substantially	Not stated
Kagboro	9,055	317	836	1,490	4,110	1,890	412
Kaiyamba	8,675	62	630	1,920	5,278	726	59
Kamajei	4,382	624	63	360	2,753	453	129
Kongbora	4,784	70	80	560	1,961	2,061	52
Kori	9,240	48	893	2,199	4,800	1,141	159
Kowa	3,799	2	88	662	2,468	454	125
Lower Banta	12,981	145	673	5,421	4,745	1,857	140
Ribbi	13,932	352	756	7,224	4,175	1,186	239
Timdale	3,021	9	21	150	1,411	1,385	45
Upper Banta	4,823	12	139	2,265	2,145	231	31
PUJEHUN	93,513	1,688	4,821	16,460	48,797	20,888	859
Barri	13,021	1,019	1,230	2,565	6,454	1,696	57
Gallinas Peri	13,372	83	733	1,473	6,634	4,346	103
Kpaka	5,480	54	284	494	2,733	1,866	49
Kpanga-Kabonde	16,195	282	1,201	3,691	8,923	1,972	126
Makpele	6,393	36	306	2,000	3,024	869	158
Malen	9,356	32	359	3,305	3,922	1,621	117
Mano Sakrim	2,720	25	39	118	529	1,986	23
Panga Krim	2,844	17	58	265	2,002	493	9
Pejeh	5,083	2	189	786	3,397	680	29

Table A16.2 Distribution of the population infected by Ebola by socio-economic impact (continued)

Region/District/ Chiefdom	Status of Ebola Patient						
	Total	Increased substan-tially	Increased	No change	Decreased	Decreased substantially	Not stated
Soro Gbema	8,996	116	333	1,126	5,007	2,316	98
Sowa	6,406	12	66	399	4,566	1,312	51
YKK	3,647	10	23	238	1,606	1,731	39
WESTERN	420,670	9,624	42,242	126,052	192,152	44,705	5,895
WESTERN AREA RURAL	132,433	2,664	11,770	29,213	69,203	17,743	1,840
Koya	21,374	256	904	4,247	12,098	3,677	192
Mountain	8,176	54	391	2,330	3,847	1,359	195
Waterloo	61,878	1,707	7,595	14,068	31,218	6,610	680
York Rural	41,005	647	2,880	8,568	22,040	6,097	773
WESTERN AREA URBAN	288,237	6,960	30,472	96,839	122,949	26,962	4,055
Central 1	20,767	423	2,112	6,949	9,510	1,660	113
Central 2	6,718	155	607	2,358	2,785	716	97
East 1	15,995	307	1,446	5,060	7,167	1,872	143
East 2	28,933	901	3,236	6,707	14,672	3,091	326
East 3	113,454	2,676	11,740	37,001	49,435	10,843	1,759
West 1	16,667	365	1,306	5,867	7,094	1,728	307
West 2	35,644	732	4,147	12,570	14,546	3,104	545
West 3	50,059	1,401	5,878	20,327	17,740	3,948	765


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